



30

Surgeon General's Office

LIBRARY

Section,

Botany

No.

111354.



A COURSE OF
FIFTEEN LECTURES.
ON
MEDICAL BOTANY,

DENOMINATED

THOMSON'S NEW THEORY OF MEDICAL PRACTICE;
IN WHICH THE VARIOUS THEORIES THAT HAVE
PRECEDED IT ARE REVIEWED AND COMPARED.

DELIVERED IN CINCINNATI, OHIO,
BY DR. SAMUEL ROBINSON.

There are herbs to cure all diseases, though not every where
known.—DR. RAY.

The Flora of our country will yet so enlarge and establish her
dominion, as to supersede the necessity of all other remedies.
DR. MITCHELL.

*Omnibus in terris, quæ sunt a Gadibus usque—
Auroram et Gangem, pauci dignoscere possunt
Vera bona, atque illis multum diversa remota
Eroris nebula.*—JUV. SAT.

COLUMBUS, OHIO.

Published by JARVIS PIKE & Co,
1835.

111354

Copy Right secured to the Author, in conformity to the act of Congress of the United States, entitled "an act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies during the times therein mentioned;" and also an act entitled "an act, supplementary to an act entitled 'an act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies during the times therein mentioned;' and extending the benefits thereof to the arts of designing, engraving, and etching historical and other prints."

JONATHAN PHILLIPS, PRINTER.

TO THE READER.

A combination of causes induced me to examine the System of Medical Botany, and deliver this course of Lectures. Of the character of an author, I am neither ambitious nor repugnant. Were the items summed together, "of all that creep and all that soar," in this department of Literature, the amount of remuneration might not be very seductive. I am but a pioneer in a path unknown, and may have stumbled in my course, or failed to clear the way; still I am persuaded enough has been done, to excite the attention of the curious, and rouse the penetration of the profound. Of all the interests of this mortal life, the preservation and care of health, is one of the most important and absorbing. Without it, existence is a burthen; days and nights, and times and seasons, perform their revolutions, spread abroad their beauties, and exhibit their varieties in vain. If, in any thing, therefore, I have contributed to relieve the maladies of the human race, by directing them to a mode of practice safe and salutary, at once within the reach of their attainments and pecuniary resources, I shall feel the highest gratification.

I know the subject on which I have discoursed, is one highly unpopular; and may subject me to the reproach of some of my best friends: but the die is cast, and the ordeal I am willing to encounter.— From the conviction, that even though I should have failed, the cause itself is susceptible of vast

improvement, and progressive elevation, I shall derive a solace which cannot be taken away. The prospects of ultimate success, and the view of conferring future benefits on society, will fortify the mind against the danger of many evils, and the apprehension of the bitterness of censure. It will obtund the keen edge of sarcasm, and defeat the purposes of malignity, to know that we are serving the cause of humanity and truth. For, though the lip of scorn is hard to bear; as we instinctively love fame, and desire to stand high in public estimation; yet there is a higher source of happiness than the applause of the world. With a mind perhaps as deeply imbued with sensibility as generally falls to the lot of mortals, I was never much afraid of any thing but the *reproaches of my own heart*. Let me have but the approbation of that invisible tribunal, and I feel as secure from every pointed dart, as the Grecian warrior under the shield and armor of Achilles.

The physicians of whom I was obliged to speak, I have spoken with kindness and candor. I have treated them with much more deference than they have accorded to each other. To reflect on a whole community and succession of learned and eminent men, might appear to the inconsiderate, as the very essence of madness and folly. And so it was said, when Galileo attacked the Ptolemaic system of the heavens, and Lord Bacon the dialectics of Aristotle. Great names may give splendor to error, but cannot transform it into *truth*.

And let it be remembered, I have not made an attack upon the Faculty; they, themselves, have alternately made it on each other. I have merely introduced passages from their own writings for the sake of argument and illustration. They have all admitted the uncertainty of medical practice,

and its great susceptibility of improvement and reduction. To spurn the humble efforts of a fellow-laborer, willing to toil in removing the rubbish and re-edifying the superstructure, would neither be patriotic nor philosophical. Let every ray of truth shine upon the subject confessedly obscure—let every improvement and discovery be cast into the balance, so long and fatally *found wanting*—let all come forward, from every corner of the land, to aid in the reduction of the great sum of human misery suffered by disease, and close up by all the powers of human skill, the avenues of death.

In this cause I have been laboring, and to this end I have directed my efforts; with what success let others testify. I now bid the reader farewell—with this single assurance, that if in any thing I have erred, or have been mistaken or deceived, or have set down aught in malice, let it be shown; let any point it out with kindness and candor, and

“Cuncta recantabo maledicta, priora rependam
Laudibus, et vestrum nomen in astra feram.”

S. ROBINSON.

PROPRIETOR'S INTRODUCTION.

The following course of Lectures were delivered during the last year, at Cincinnati, Ohio, voluntarily, without the knowledge of the author of the Thomsonian System, he being at the time a thousand miles distant from that place. The writer had no other knowledge of the System than what he obtained from a few books that had fallen into his hands on the subject, and his personal observation of the success of the practice. He has treated the subjects with much candor and impartiality, and discovers himself to be a man of learning, and well acquainted with the theories and practice of the regular physicians. He is entitled to the thanks of the author of the Botanic System, and all those who take an interest in its success. An edition of the work, it was thought, would be useful, and would be read with pleasure and profit by the friends of the System, to whom it is recommended, and also to the perusal of the public generally.

Boston, October, 1830.

COURSE OF LECTURES.

LECTURE I.

INTRODUCTORY REMARKS.

Ladies and Gentlemen :

We have assembled on this evening for the purpose of introducing a course of Lectures on Medical Botany—generally denominated Thomson's System of Medicine.

I am well aware that the prejudices existing against it are numerous and strong ; and so they have been against every new discovery, or invention, since the beginning of the world. Since the day that Noah built the ark, and had to encounter the mockery and scorn of the Antideluvian race, till the present hour, obloquy and proscription have assailed every new and untried experiment of man.

This spirit forms one of the most *unseemly* traits in the human character. It indicates a state of mind, neither resting for success on the resources of its own power, nor relying on the superintending care of a just, a wise, and holy Providence. Because we ourselves are not *first* in the *discovery*, or because it might militate against our *interests*, we would wish it buried—yes ! no matter how useful or benevolent !—we would wish it forever buried in the cave of the Cyclops,

Pride and presumption lie at the foundation of all this hostility. It presumes either that all which can be known is already discovered, or that our own fair fame must not be tarnished by the superior penetration of exalted minds. If we had humility to remember, that the progress of mind is endless as duration—and the question of the inspired Elihu, “Who hath searched out the works of the Almighty to perfection?” we might be willing to concede to others, with all complacency, the signal honor of having added one single item to the great sum of human knowledge.

Let us remember, in the language of an eloquent writer, that pride is unstable and seldom the same. That she feeds upon *opinion*, and is *fickle* as her *food*. She builds her lofty structures on a sandy foundation—the applause of beings every moment liable to change. But *virtue* is uniform and permanent; and fixed upon a rock are the towers of her habitation: For she looks for approbation only to Him, who is the same, yesterday, to-day, and forever.

The road to glory would cease to be arduous if it were trite and trodden. Great minds are not only ready to seize upon opportunities, but they make them themselves. Alexander forced the Pythean Priestess on the Tripod, on a forbidden day—the Pythia exclaimed “My son, thou art invincible.” It was all the oracle the warrior desired! On another occasion, he cut the Gordian Knot, which others had endeavored to untie in vain—and thus accomplished the oracle which ascribed to him the Empire of Asia. Nelson, when the statue of Victory was holding her laurel wreaths in either hand, uncertain where to bestow them—Nelson seized upon *both*! Those who start in the career of glory, must, like the mettled steeds of Actæon, pursue

the game not only where there are paths, but where there are none.

For it is given to man, and is the high distinction of his mental powers, not only to explore the whole circle of human science—but passing that awful and venerable limit—bearing in his hand the torch of intellect—enter alone, the trackless wilderness, untrodden by mortal feet—to travel on a path *which the vulture's eye hath not seen, nor the lion's whelps trodden, nor hath the fierce lion passed thereon.* Enclosed on every side by the magnificent scenery of Jehovah's works—he may exclaim with the Prophet, *the works of the Lord are great, and sought out by all that take pleasure in them!*

It is sweet and dear to the mind, the acquirement of knowledge. But, in the acquisition of a *new truth*, gained by the efforts of our own industry, there is a sort of holy and divine *unction*, which is not to be obtained by wisdom derived from the labor of others.

From the very nature of our immaterial structure, and every thing gleaned from its operations, we are well assured that wisdom is progressive and eternal; that our highest attainments are but as the perception of infants, crawling on the very threshold of *being*, in comparison of that knowledge of Jehovah, his *works and ways*, that shall pour its radiance on the unclouded intellect of man, as he rises from the blow of death, and wings his mighty and majestic flight amidst the boundless splendors of eternal worlds; where he shall look on that ineffable glory, of which eye hath not seen, nor ear heard, nor hath it entered into the heart of man to conceive the magnificence of its uncreated beams! The inspired writer, from the awful elevation of the third heaven, suddenly dropt his wing, and cut

short the history of his visions, at the awful remembrance of that overwhelming sight of dazzling splendor, which filled his soul with *silence and adoration* !

If the wise and learned only were to make discoveries, it could be borne—a strong prejudice and opposition would be rooted from the mind. But that the illiterate, the mere plough-boy, and the peasant—a man like Samuel Thomson, who had spent his life among the clods of the valley—and himself but little superior to the dust he walked on—that he should pretend to make discoveries in the science of medicine, and *invent forms, and medicines, and rules*, to enlighten its exclusive and profound professors—is not to be endured by men, *proud of their high attainments, and fortified by all the tenacity of system* !

If I might quote the poet Burns, in this serious discourse, it might be of service to them *who think more highly of themselves than they ought to think*. In his address to the *unco guid and the rigid righteous*, the poet was endeavoring to cast the mantle of his charity over the poor, fallen daughters of misfortune—and thus addresses the proud *matrons* of Scotland:

“ Ye high exalted virtuous dames,
Tied up in godly laces,
Before ye gie poor *frailty* names,
Suppose a change of cases.
A dear lov'd lad”——

But I desist—you may read for yourselves.

Let the brightest son of medical science, suppose a change of cases with Dr. Thomson, and but for that care of the good and holy Providence, of whom, perhaps, he has never acknowledged the existence, he might have been consigned to the plough-tail, and Dr. Thomson to the wisdom of the schools.—

And thus situated, would he have considered it a crime in himself to have forced his way through all the *asperities of nature*, the *obstructions of poverty*, the *absence of education*, and the iron and heavy hand—the combined phalanx—of science, of wealth, and power, and popularity, arrayed against him, to spurn, to trample him down, and crush him to the earth, and plunge him in oblivion forever!—would he have thought it criminal in himself to resist this terrible array; to rise superior to the blow that would have cloven his fortunes down; and, by the unaided innate vigor of his own intellect, have forced his way, in despite of enemies, to wealth, and rank, and fame, and taken his station amongst the benefactors of the human race? No, I am persuaded he would not; for it is the very path in which superior minds do most delight to travel—the untried, stormy, journey of perilous adventure—according to the saying of that modern sage, Dr. Johnson, “The man that can submit to *trudge* behind, was never made to *walk* before.”

Beyond all this, we are presented with solemn facts from history, to show us that, perhaps the *learned* are as much indebted to the *illiterate*, for their observations, as the latter to the former for their science. They are equally necessary to each other, in forming the sum of human things—from

“The poor Indian, whose untutored mind
Sees God in clouds, and hears him in the wind,”

to the soaring spirit of the philosopher, traversing the starry sky.

In vain do enlightened nations *boast* that they have gathered within themselves all the arts and sciences. The earth is covered over with vegetables and animals, the simple vocabulary of which,

no scholar, no academy, no nation, whatever, will ever be able perfectly to acquire. No, nor all the human race, in their united wisdom, shall be ever able to find out the limits, the name, and nature of her innumerable millions !

We, therefore, with all humility, in consideration of our profound ignorance, should be willing to glean from every source which promises an accession to the stock of our materials.

“ And it is to savages—to men utterly unknown, that we are indebted for the first observations which are the sources of all science. It was neither to the witty and the polished Greeks, nor the grave and stately Romans—but to nations which we denominate barbarous, that we are indebted for the *use of simples*, of bread, of wine, of domestic animals, of cloths, of dyes for cloths, of metals, and for every thing most useful and most agreeable for human life. Modern Europe may glory in her discoveries; but the Art of Printing, which ought to immortalize the inventor, has been ascribed to a person so obscure, that the world could scarcely fix upon his name, or ascertain his identity, so that several cities of Holland, of Germany, and even China, laid claim to the discovery as their own !

Galileo would have never weighed and calculated the gravity of the air, but for the casual observation of a fountain-player, who observed in his presence, that water could only rise thirty-two feet in a forcing engine. And the sublime Newton would have never read these heavens, but for the occurrence of some children, in the Isle of Zealand, playing with the glasses of a spectacle-maker; which first suggested to him the idea of the telescopic cylinder. And perhaps the arms of Europe would have never been able to have subdued Ame-

rica, had not an obscure monk made the discovery of gunpowder.

And whatever glory Spain may attribute to herself for that discovery—the nations of the East—the savages of Asia—had founded mighty empires, of splendor and renown, over that vast continent, which Spain could never rival, notwithstanding her boasted wisdom and erudition! And the great discoverer himself, Christopher Columbus, whose name this vast portion of the globe shall bear upon its bosom to immortality—would have perished with all his followers—and his discoveries perished in the ocean with him—had not the kind hospitality of the simple aborigines furnished him with food. “It was the fortuitous observation of the Colonel of a marching regiment, which instructed the great Sydenham in the utility of bleeding in inflammatory fevers!”

Let, then, academies and schools accumulate their machines, and models, and books, and systems, and eulogiums; the chief praise of all is due to the ignorant who furnished the first materials!

And let those who have reached a boundary at which they have designed to stop, not envy, nor impede the progress of him who is determined to press forward till his journey shall end in the dark valley of the shadow of death.

Amidst all the innumerable branches of knowledge, which solicit the attention of the human mind, there can be none of so much importance, religion only excepted, as that which shall constitute the subject of the following Lectures—the Healing Art. For the soul in a diseased body, like the martyr in his dungeon, may retain its value, but has lost its usefulness!

Such is the nature of man, under the strong power of sense and sympathy; influenced by all the

elements around him, and the energies of thought within him—wearing out his mortal covering—sapping the foundations of his house of clay—while the passions pour a continual storm upon the wheels of life. Thus circumstanced, and impelled forward by the combined actions of so many agents, to that “bourne from whence no traveller returns”—it is not astonishing if man; although the soul is so much superior to the body, should bestow upon the care of the latter, the principal portion of his labors and his life.

Medicine is therefore a study, not only of curious inquiry, but of deep interest, to families and individuals, who, after all that has been done by its professors, ought, in fact, to be their own physicians. And this great desideratum Dr. Thomson professes to aid and establish, by his own discoveries.

To promote health of body and tranquillity of mind, the sages of antiquity labored with the most severe and incessant toil. They studied the constitution of man, that they might find out the seat of his maladies and the sources of his misery.

To assuage the sorrows of the heart, and lift the load of melancholy from the desponding mind; to restore to the wounded spirit its elasticity and vigor; they exhausted all the *powers* of reason, and all the arguments and arts of their divine philosophy. Sometimes they succeeded, but they often failed. It was from a deep sense of the inadequacy of their feeble powers to eradicate the disorders of the mind, that led them to look for divine succor, to that benevolent Being, who sits upon the circle of the heavens, and showers his mercies down upon the world. And this aid was not implored in vain: The day arrived. The veil of superstition was rent in fragments. The Apostle,

from the hill of Mars, led them to the knowledge of their unknown God. He conducted them to the infinite sources of wisdom and consolation, in *Him in whom there is fullness of joy, and at whose right hand are pleasures forever more.*

In their application to the diseases of the body, the Greeks were more successful than in their applications to the mind. And if we may believe the current testimony of ancient writers, they had more power over their patients, in stemming the inroads of dissolution, than the moderns have obtained after all the improvements of advancing science. It is certain, they often arrested the career of death when he appeared in his most awful and terrific forms. Athens was rescued from the plague by the skill of a single man!

It was in the commencement of the second year of the Peloponnesian war, that the plague broke out in Athens; and never before had this dreadful scourge of the human race, ravaged so many countries and climes. Rising on the burning brow of Africa, through Ethiopia, Egypt, Lybia, and Persia, Syria and Cyprus, and Lemnos, together with many other places of Asia and isles of the Ægean sea, it held its dreadful and desolating course.—The nations stood appalled in its presence, and thousands perished by its breath! A merchant vessel landing in the Pyræus, brought the disease to Athens; and this fell destroyer raged with a fury before unknown, over that celebrated city of Minerva. Its fearful and rapid progress seemed to bid defiance to all mortal skill. From the first attack of the disease, the powers of the mind seemed blotted out, while the body acquired new and additional strength; as if the enemy, on purpose, had augmented the power to suffer. The torment was terrible. The *sick* were seized with despair, and

the *sound* confounded with madness. All the laws of equity and social order were trampled down.—Scenes of riot and confusion, and reckless tumult, surrounded the march of death! The diseased were first smitten in the head; from this the malady passed down through the whole body, leaving in one shapeless, ruined mass, that noble form divine. But the sufferers seldom waited for this terrible catastrophe; but, in the beginning, in the fury of distraction, plunged into wells, rivers, and the sea, to quench the consuming fire that devoured within them!

It was in this awful crisis of her ruin, that one man—one single man—skilled in the use of those divine remedies, which the God of Nature has lodged in the herbs and flowers of the field, entered the devoted city, and shook off, with a giant's strength, the deadly grasp of the destroyer. The sound of his very name poured hope and consolation through the torn bosom, filled with the agonies of despair! This man was the far-famed Hippocrates. He dwelt in the island of Cos. At the breaking out of the plague in Persia, Artaxerxes the Great, king of the empire, wrote to the physician to hasten to the relief of his dominions. He allured him by the most magnificent promises; the most splendid offers of wealth and honors. But the physician replied to the great king, that he had neither wants nor desires, and he owed his service and his skill, whatever they might be, to his country, rather than to her enemies! This magnanimous reply so enraged the monarch that he sent a squadron to bring him by force of arms; but Hippocrates had sailed for Athens. And the power of his fame upon the mind, and his skill over the body, scattered the shadows of death, and shed around him a radiance of joy and hope, as if an angel's visit had lighted upon the city.

To purify the air, he caused large fires to be kindled in all the streets and lanes of Athens. And to relieve the suffering from the consuming heat which devoured their entrails, he placed them in warm baths, to expel the infection by the surface of the skin; and to support their weakness, caused them to drink of the rich wines of Naxos.

These great examples of success and diligence in the healing art, to discover and apply new modes of cure, when we find all the *common* and *established* forms baffled and confounded; should dispose us to cherish, as the martyr would his faith, whatever discovery may be calculated to deliver us, by a short and simple process, from the long train of diseases entailed upon our fallen race. Before Hippocrates arrived, all the physicians of Athens had either fled or fallen with their victims. They had no success. Their practice seemed rather to aggravate than to remedy the miseries of the dying.—Why had Hippocrates so much control over the pestilence? Because he applied a new method of relief; one that seemed to strike down, at once, the strong hold of the destroyer!

From all these considerations, and from the fact, that the healing art is yet in its infancy, by the confession of its most successful and celebrated practitioners; the great and venerable Dr. Rush compares it to an *unroofed temple*:—Uncovered at the top and cracked at the foundation—unless you admit his own theory of animal life, as a sure and solid basis—for he scatters, like atoms in the sun-beam, all the systems of pathology, that have gone before him. From all these, we ought to deeply ponder the peradventures which Providence may elicit by any means, to diminish the sum of misery, before we spurn from us what has been discovered, tried and found effectual.

After bewailing the defects and disasters of medical science, Dr. Rush consoled himself with the animating prospects of that *hope*, which he often proclaimed from his desk—that the day would arrive, when medical knowledge should have attained to that apex of perfection, that it would be able to remove all the diseases of man, and leave not for life a single outlet, a single door of retreat, but old age; for such is my confidence, said he, in the benevolence of the Deity, that he has placed on earth remedies for all the maladies of man. I remember still, with a thrill of love and gratitude, to that admired and venerable professor, with what enthusiasm and transport, and prophetic vehemence, he used to pronounce that sentiment at the close of his lectures. His confidence in the benevolence of that Deity was boundless, and his own soul largely partook of that divine character of the Almighty. We shall not, shortly, look upon his like again.—*Quam de invenient parem?*

The influence of this *hope*, so feelingly expressed and deeply felt, by every noble mind, that all diseases shall yet yield to the power of medicine, in its perfect state, ought to be abundantly sufficient to determine us to examine with candor, every new discovery, that is presented by the care and experience of man, whatever may be his state or condition in life. *Great men* are not always *wise*; and the very *meanest* is not beneath the *care* of a kind Providence, nor the influence of his *holy spirit*.

“For thy kind Heavenly Father bends his eye
On the least wing that flits across the sky.”

And if, perchance, the grand Panacea shall be at last found—that Moly of the Egyptians, and Elixir of the Greeks—who would not deem himself more honored by contributing the smallest item to

the great discovery for relieving the wretchedness of the human race, than if he had bestowed upon him the Empire of the world? I saw *one fever* rage, and prostrate its victim, over which the physician's skill had no influence. To have saved *that life*, to me so precious, I would have given the universe, had I possessed it, and would have considered it but as dust in the balance. No doubt others feel as I do. And if the period shall arrive, when the heart strings shall no more be torn, and lacerated, who would not exult in the joyful anticipations of that coming day! And this dream of a universal medicine, which has pervaded the nations of the earth, since the days of Isis and Osiris, is, not all a dream—for *the days shall come, saith the Lord, when there shall be nothing to hurt, or annoy, in my holy mountain.* No pain to hurt, nor sickness to annoy.

But whether diseases shall be banished from the globe, in that glorious period of the Millennium; or the grand catholicon be discovered, to remove them, the data do not determine. But this we know, the earth shall have *health and peace*; and Dr. Rush's hope will be fulfilled, even beyond the limits of his most sanguine expectation; for the child shall die an hundred years old.

It is the purpose of this course of lectures, to lay before the people, a succinct account of Thomson's System of Medicine, that they may judge from the mode and results of this new practice, of its fair and honest claims to the public confidence and admiration. There is no design to gild over errors, nor to mislead the minds of the unwary. We shall submit it, simply in its own merits, to the grand criterion of all new discoveries—the understanding and reason of man. Whatever is true and valuable, let it be retained; but if there be any thing

false or pernicious, let it be given to the winds, or discarded to that oblivion, where all have perished that could not brook the light!

And in thus submitting the "*New Guide to Health*," to the public scrutiny of their fellow citizens, the friends and followers of Dr. Thomson, have pursued the *path* marked out to them by many of the greatest men of antiquity; who often turned aside from the forms and dogmas of the schools, or submitted their cause to the tribunal of public opinion. And they were never deceived: For God has lodged the fund of common sense in the mass of the assembled multitude. These assemblies were dear to every land of liberty; and it was on the appeal to that assembly, and its decisions, that the ancients established the maxim, so often in their mouth, *Vox populi, vox Dei*. The voice of the people is the voice of God.

Dr. Thomson says, "It has long been a subject in which I have taken a deep interest, to publish something not only useful to the world, but also, that would convey to them my system of practice; in order that they might reap the advantage of curing disease, by a safe and simple method of my own invention." "One other subject, also, I have had in view; that is, to lay before the public a fair statement of facts, that they may have a correct knowledge of the trials and persecutions which I had to endure in bringing my system of medicine into use among the people."

Dr. Thomson was not brought up in the schools and colleges of the learned. But he was trained in one far superior, for eliciting the powers of an original mind—the severe school of adversity—that perilous ordeal where the feeble-minded perish, but the great of heart come out of the fires, purified and resplendent in tenfold brightness. They

rebound by the very impulse and pressure of the blow, that was designed to crush them, and reach their elevation in the sky; to refute an objection made against the goodness of Divine Providence—that the *virtuous* were often, not only destitute of the blessings of fortune, but of nature, and even the necessities of life.

To this objection St. Pierre returns the following beautiful and profound answer: To this, said he, I reply—The misfortunes of the virtuous often turn to their advantage. When the world persecutes them, they are generally driven into some illustrious career. Misfortunes are the road to great talents; or, at least to great virtues, which are far preferable.

It is not in your power, said Marcus Aurelius to a friend who was exhausting his breath upon the unequal distribution of the favors of the gods—it is not in your power to become a great natural philosopher, a poet, a mathematician, an orator, or an historian; but it is in your power to be an honest and a virtuous man, which is far superior to them all! Use well the gifts the gods have given thee, and leave off repining at the good they have denied.—For the very talents thou sighest after are far from conferring happiness upon their possessors.

The splendor derived from successful studies, seldom repay the occupant for the lassitude and exhaustion of the mind; the feverish debility and throb of nervous excitement which thrill through all his frame.

The peasant in his cot, perhaps has more real enjoyment—and certainly has more peace and calm contentedness, than the philosopher, crushed to an untimely grave by the very magnitude of his studies.

Inter silvas academi quærere verum—as the poet says: To search out truth through academic groves may be very pleasing, but is often a very unprofitable occupation. You may behold the scholar, pale, over his midnight lamp, and far distant the golden dreams of honor and applause, which he is never destined to *realize*. How disconsolate is the condition of an intellectual being, who thus suspends his happiness on the praise and glory of the world? The good Aurelius gave an advice, worthy of being inscribed in letters of gold. He who places his heart on material objects, or expects to draw the streams of consolation from the resources of the world, must be exposed, in every vicissitude, to the keen pangs of anguish. The slightest calamities will disquiet and trouble his soul. In adversity he is cast down, and every stay on which he leaned for succor, like the infidelity of Egypt—as a broken reed—will pierce him to the heart.—From the gay and lofty summit of his pride, and presumptive daring, he sinks to the deplorable level of his own weak and worthless presumption. *Quantum mutatus a billo*—is that sunken, hopeless condition.

This glory of the world, uncertain as it is, is not within the grasp of many minds. And even those who are able to seize the gay and gilded prize, it stings in the very embrace, and perishes in the enjoyment. But the path of virtue, that leads to happiness on high, lies open to every traveller; and he can neither be mistaken in his course, nor disappointed in his acquisition. He has with him, and around him, in the darkest hour, in the lone desert or the crowded city, a Being who knows his pain, and hears every sigh of his complaints. He made the soul, and is able to delight and ravish its inmost faculties, with the communication of joys unspeakable.

How noble was the sentiment expressed by Sir Isaac Newton: Speaking of infinite *space*, he said " it was the *sensorium* of the Deity;" as if a fibre touched, in the most minute, remote or worthless of all his creatures, could *move* the spirit of the eternal *Godhead*. This view of his power and his providence, inspires the heart with a holy hope, and high dependence, far above the influence of a troubled and a fleeting world.

Queen Elizabeth, when her triumphant fleet had swept from the ocean the *invincible* armada of Spain, had medals struck, with this most beautiful and appropriate motto: *Afflavit Deus, et dissipantur*. "He blew with his wind, and they were scattered." How exalted the thought! The belief of a divine and superintending Providence, taking care of us and our concerns, elevates and ennobles the mind. It transports a mortal creature to the high and holy meditations of angelic beings, and fills the soul with the purity and peace of heaven.

LECTURE II.

HISTORICAL VIEW OF ANCIENT THEORIES.

THAT divine philosopher, Plato, said, *light* was the shadow of the Deity, and *truth* his soul. That the wise and good, as they approximated to the source of glory and intelligence, were clothed and animated by that heavenly essence, which he poured out from the fountain of his eternal being: That into the cup *mixed* for the formation of man, he poured a portion of his own divinity; that this divine principle, rational and immortal, resides in the

brain, the seat of sublimity and great conceptions; but another soul, which dwells in the breast, formed by the inferior deities, was mortal and destitute of reason; which contracts *evil*, *pain* and *sorrow*, and involves all the woes of man, *misery* and *death*, and the despair of Hades! That the gods, not being under the influence of this mortal inferior soul, do good to man without selfish or interested views; and man, as he aspires to the divine life, acts upon the same principle.

The admirable saying of Bias, one of the seven sages, was greatly esteemed by this philosopher, "*Omnia mea mecum porto*"—I carry with me all my possessions: Being wholly occupied in promoting the public good, and laying up the treasures of the mind, of which neither *fate*, nor *foes*, nor *death* could rob him, he accounted every thing else as nothing.

Those who devote themselves to a new *theory*; who have to stand alone in the defence of an unknown *truth*, and to combat alone the triumphant pride of an established science, would require a large portion of the self-denying spirit of the Grecian sage. And Dr. Thomson seems to have been admirably endued with that supreme devotion to his *object*, which brings the martyr to the stake and the patriot to pour out his blood on the field of battle. A loss of five thousand dollars, to a poor man with a large family, imprisonment and chains, and the tribunal of death, are trials which might shake the fortitude of the firmest nerve. I cannot help uniting in his own sentiment, that Providence must have presided over his labors, with an especial care, for the good of society, or he never would have brought them to such a triumphant conclusion.

In order to unfold and display the system of Dr. Thomson more thoroughly, I will take a review of

those theories which have obtained in the world, and triumphed in the schools, until they met the fate of all terrestrial things.

For the origin of medical science, we are indebted to Egypt, that profound and universal school of the ancient world. Their medical knowledge was famous in the days of Moses, and her physicians celebrated in his history. The aliment and ablutions recorded in her books—so congenial to the health of an eastern clime—enforced on the observance of Israel—have been ascribed to his knowledge of the Egyptian science of medicine, by those who have denied to him the high prerogative of having acted under the inspiration of the Almighty.

The invention of medicine is generally ascribed to Toth, Taautus, or the first Hermes. He was regent or king of Egypt, of the second dynasty of Manetho, and the tutor of queen Isis. Julius Africanus, and Sincellus, make him the same as Sydic brother to the Caberri. He published six books on physic; the first treated of anatomy. The name of Esculapius or Asclepeus, was given him, on account of his great skill in healing diseases, as the *terms* import; being a compound of two Greek words, *asclen* and *epeos*—Merciful healer! And this name he richly merited, according to all the history and tradition of these times. He taught the healing art to queen Isis; who, herself was the inventor of several medicines, and is therefore called, by the Egyptians, the Goddess of Health. She taught medicine to her son Orus or Apollo, and communicated her knowledge in the writings of the Caberri.

The distribution of medicine into distinct departments, gave rise to a vast number of physicians in Egypt, and would have been a source of great

improvement in the science, had it not been for the restrictive *laws* of that ancient kingdom. Every physician confined himself to the *cure of one* disease only. One had the *eyes*, another the *teeth*, the *head*, the *belly*, the *lungs*, the *reins*, the *viscera*, *surgery*, *anatomy*, *embalming*. Such undivided attention to one object only, was defeated in all its beneficial results, by confining the physicians to fixed rules and recipes, set down in their sacred registers, collected from experiments and observations. So long as the physician practised according to those rules, he was safe, let the effect of his medicine on the patient be what it would; but the moment he dared to depart, and follow his own judgment, it was at the hazard of his life; which he most assuredly lost if the patient died.

Physicians had a provision made them by law, which required them to practice in the army, and on stranger travelling in the country, without fee or reward. Their medicines were very simple prescriptions, prepared from herbs; and were generally evacuents—which they effected by *injections*, *potations*, *emetics*, *fasting*, and the *waters of the Nile*. These they repeated every day, or every third day, as the case might be, until the patient was relieved.

The physicians, in addition to their science, joined the studies of *astronomy*, *magic*, and *ritual mysteries*; believing that the influence of a god, a star, or planet, or tutelar demon, gave powerful influence and efficacy to their prescriptions, and secured the recovery of their patients.—*Religion* mingled with all their operations. Their books were filled with recipes founded on experiments and observations. But their grand discovery—their *Moly*—a chemical preparation, made by the aid of the philosopher's stone, or as others say, a vegetable reme-

dy—an immortal catholicon, which not only cured all diseases, but restored the aged to youth, and the dead to life; this grand elixir, their priests carefully concealed from the Greeks.

Their kings caused bodies to be dissected, for the purpose of perfecting them in the art of physic.—In *anatomy*, they have left us two curious observations. 1.—A particular nerve proceeds directly from the heart to the little finger of the left hand. On this finger the Egyptians always wore rings; and the priests dipt that finger in the perfumed ointments, to sprinkle the victim and the worshippers. 2.—That a man cannot live more than an hundred years; because they found by experiments, that the heart of a child one year old, weighed two drachms; that it increased by the ratio of two every second year, till fifty; when it decreased in the same proportion till one hundred; when the aged actually died for want of heart.

CHIRON.—Medicine was brought from Egypt to Greece, by the sage Chiron, the centaur, and son of Saturn. He accompanied the Argonautic expedition, and was the most learned genius of his time. He taught Apollo music, Esculapius medicine, and Hercules astronomy. He was also the tutor of Achilles, the instructor of Jason, Peleus, and Æneas; and all the heroes of that celebrated expedition. His knowledge of *simples*, reduction of fractures, and luxations of the bones, prescribed by rule, after the Egyptian fashion, is all we have left us of his theory of medicine. He was shot in the heel by a poisoned arrow, and prayed Jupiter to take away his life. The god heard his prayer, and translated him to the heavens, where he shines in the constellation Sagatarius.

ESCULAPIUS, the Greek, and scholar of Chiron, was the son of Apollo and Coronis. He flourished

before the Trojan war. In his infancy he was exposed on a mountain of Thessaly, and was suckled by a goat, and defended by a dog. The shepherd having for sometime missed his goat and dog, went to seek them on the mountains, and found the child possessed of extraordinary beauty. The shepherd brought it up with the greatest care; and when a boy, he placed him in the hands of the sage Chiron, by whose instructions he so largely profited, that his fame far surpassed that of his master. He taught his two sons his divine art—Machaon and Podalirius, who were afterwards celebrated in the war of Troy. He dedicated his days to the relief of the unhappy, and added his own experience and observations to those of his master Chiron. The most dangerous wounds, diseases and maladies, yielded to his operations, his remedies, his harmonious songs, and his magical words. The gods would have pardoned all his glory and fame of superior skill; but his great success and daring mind, induced him to recall the dead to life. Pluto was so enraged at this inroad on his dominions, that he struck him dead with a thunderbolt! He was deified by the Greeks, who showed the most unbounded love for his memory. Forty stadia from Epidaurus, you will find his temple, his statue, and his sacred grove, to which the sick resort from every place, to seek a cure from their various maladies.

The inscription over the entrance of his temple, is at once solemn and affecting—“*Procul este profani*—far hence ye profane—none shall enter here but the pure in soul.” The *secrets* of his art he communicated to his children, and they were retained in his family until they burst forth, with peculiar splendor, and shone out to the possession of the world, in the writings and the character of the divine Hippocrates.

HIPPOCRATES. He was born in the island of Cos, 80th Olympiad, 461 A. C. of the family of the Asclepiadæ; for his father was the 17th in lineal decent from Esculapius, and 16th from Podalirius, who dressed the wounded before the walls of Troy, and afterwards reigned over a small city in Thesaly. He studied medicine under his grandfather Nebrus, and his father, Heraclides—to which he added the reading of the tablets hung up in the temples, describing the nature of diseases, and the mode of their cure. This was a custom among the ancient Greeks, and is still practised in the East; a custom of great utility and long standing.

The family of the Asclepiadæ had carefully preserved the doctrines of their progenitor Esculapius, and had established three Medical Schools, in Cos, Cnidus, and Rhodes. Their fame began to spread, when this master spirit of the healing art—the *Homer* of medicine, as he has been called—appeared to contend for the prize of victory, on the great *arena* of public effort and emulation. His mighty mind soon perceived defects in the system of his progenitors, and he grappled with its difficulties, and set himself to find out and apply a remedy, equal to its vast importance.

As the grand sum of all medical skill consists in *reason* and *experience*; and as the union of these, forms the accomplished and successful practitioner, he prepared himself to add reason and argument to the rules of Greece and Egypt, and at once exalt medicine to the dignity of a *science*! And this he accomplished, (notwithstanding he has been denounced an empiric,) with a perseverance and success, which, perhaps, have never since been equalled, nor so honored and distinguished the labors of any single man.

Practice and *theory* were so remarkably combined

and blended in the character of this profound original sage, that his decisions in medicine were received like the oracles of Apollo; not only with confidence, but with veneration.

The improvement of medicine, at this period, depended on two classes of philosophers, unknown to each other; the Sophoi—the students of natural philosophy, who comprehended the human body as a part of their science—and the Asclepiadæ, who studied the history and cures of disease; the descendants and disciples of Esculapius. The former examined the functions of the human body, according to the laws of their own science; while the latter prescribed for diseases according to fixed rules, established and confirmed by numerous cures and experiments. The philosophers *reasoned*—the Asclepiadæ *acted*.

Hippocrates, educated in the art of physic, found at once the vast advantage that would be gained, by obtaining the knowledge of philosophy, and thus enrich medicine by a union of both sciences. He applied himself with the utmost vigor and industry to philosophy—to penetrate the essences of bodies—and endeavored to ascend to the constituent principles and powers of the universe.

He thus conceived one of those grand and original ideas, which serve as a new era, in the history of genius. This was to enlighten the *experience* by *reasoning*, and to rectify theory by practice. In this theory, however, he only admitted principles which may explain the phenomena observable in the human body, considered with respect to sickness or health. Improved and exalted by this new method, the science of physic made a more sure and certain progress in the path opened before it. Hippocrates silently effected a revolution which has changed the face of Medicine, and caus-

ed it to rank with the sublimest parts of human science.

It would be equally useless and prolix, to enlarge on the happy experiments he made, of the new remedies he discovered, or the prodigies he wrought, in all the places honored with his presence; especially in Thessaly, where, after a long residence, he died, at the advanced age of ninety-nine. From all that has been related concerning him, you can preceive in his soul but one sentiment—the *love of doing good*—and in his long life, but *one single act—relieving of the sick!*

His remarks on the various stages of disease, and signs of their critical events, are the foundation on which physicians act and reason, to the present hour. He also takes notice of the motion and circulation of the blood. This discovery has been attributed to Dr. Harvey; but we have the testimony of his own works, of his disciples, Galen, of Riolan, Drelincourt, Van Swieten, &c., that Hippocrates understood the circulation of the blood and the nature of the sanguiferous system.

His works are contained in eight folio volumes. 1. Journal of the maladies which he followed through their different stages. 2. Observations on his own experience, and the experience of preceding ages. 3. Reasonings on the *causes, cures and symptoms* of diseases. 4. On airs, waters, and places. 5. The four last, treat of the duties and qualifications of a physician, of various parts of medicine, and natural philosophy. His rules for the education of a physician, are the most admirable that were ever penned. Perhaps we have no essay on education to qualify for any profession, equal to the rules of Hippocrates.

“1. Because our life is short and our art very long, a boy must be taken in early youth. 2. Ex-

amine whether his genius be adapted to the art.—

3. Has he received from nature an exquisite discernment, a sound judgment, a character in which *mildness* and firmness are combined—that he may sympathize and suffer with the sufferings of others; that he may naturally feel the tenderest commiseration for the woes incident to his fellow mortals. 4. He must combine the *love of labor*, with the desire and emulation of all that is amiable and praiseworthy. 5. Let him practice the manual operations of surgery. 6. Let him study the whole circle of science. 7. Let him travel and extend his knowledge through different countries and cities—let him observe the difference of airs, and waters which are drank. 8. The eatables which are the principal food of the inhabitants!—and in one word, all the causes which may occasion disorders in the animal economy. He must know by what preceding signs maladies may be known, by what regimen they may be avoided, by what remedies cured.

Experience alone, is less dangerous than theory without experience—for it is not in the dust of the schools, nor works of the philosophers, that we can learn the art of interrogating nature—and the still more difficult art, of awaiting her answer.

You must conduct him to the abodes of pain, already veiled with the shades of death; when nature, exposed to the violent attacks of the enemy, falling, and rising only to sink again—displays to the attentive eye her wants and resources. The disciple, as he witnesses this terrible combat, shall observe the watch and seize the instant which may decide the victory, and save the life of the patient.” In this description of a student’s qualifications, he has drawn a portrait of himself.

His style is concise and beautiful; but requires attentive study to comprehend his force—as he

scatters the seeds of his doctrine with a rapid hand over the vast volume of his works, after the manner of the ancients; who were ever prone to disregard trivial difficulties, while they hastened forward to some grand conclusion. They were more anxious to strike out new, than to dwell on trite and trivial ideas. And this fact will, no doubt, account for the *sublime* and *grand*, in the style and compositions of antiquity—so rare in modern works. His death was greatly deplored by the Greeks, and his memory cherished; and his name has been revered and venerated by all nations. The divine Hippocrates—the Father of Medicine—are the common appellations by which he is distinguished until this hour.

CELSUS was born at Rome or Venice, and flourished under the reigns of Augustus, Tiberius, and Claudius Cæsar. He was a profound admirer of Hippocrates, and leaves this strong testimony to his memory, and the fame of his works. His doctrine, said Celsus, has spread over every land; and when thousands of years shall have passed away, it shall perform thousands of cures, and carry relief and consolation to the afflicted race of man! He seems to have practised on the system of his great predecessor, and to have gained from his discoveries great skill in inflammatory and malignant fevers, especially the plague. He wrote eight books on medicine; the four first on internal diseases, the fifth and sixth on external diseases, and the two last on cases which properly belong to surgery. He was much beloved at Rome, and held in high consideration by the Emperors.

GALEN was born at Pergamus—he was a most diligent and laborious student. He closely followed his great leader, Hippocrates; and wrote a commentary on his works. He confesses, with grati-

tude, the vast obligations he owed to that father of medicine—mentions his knowledge of the motion and circulation of the blood, and great skill in anatomy. Galen travelled through many countries to improve his knowledge. He visited the different schools of Greece and Egypt, and the islands of Crete, Cyprus, and Rhodes; made two voyages to Lemnos to examine the Lemnean earth, at that time celebrated as a medicine: travelled to Palestine, and the Lower Tyrus, to examine the properties of the Opopalsamum, or Balm of Gilead. He at last arrived at Rome, in the reign of Marcus Antonius, and was at first graciously received as a distinguished stranger. But his great success and skill in practice; soon excited the envy of the Roman physicians. They branded him with the name of Theorist, and affirmed that he used magical words in his practice. He retorted upon them the name of Methodics. His situation was rendered unpleasant; he found the opposition was too strong for him. After a residence of five years he returned to Pergamus.

The dogmatists, says Dr. Ray, are certainly so far right, that a knowledge of the animal structure is necessary, in order to know how to repair it; though this belongs more properly to surgical operations. Yet the empirics who rely on experience and practice exclusively, and are therefore called quacks, can retort, with equal justice, upon their opponents, that there is no relation between the animal economy and functions, in a living, sound, and healthy state—and a diseased or dead body, destitute of these.

After Galen had remained some time at Pergamus, the plague made its appearance at Aquilia and Rome, during the joint reign of Marcus Aurelius and Lucius Verres. The fame of Galen, and his

skill in curing that disease, induced the Emperors to send for him. He arrived; and had the felicity to cure the two sons of Aurelius, Commodus and Sextus, who had been smitten with the infection. This event so established his name, that all hostility against him ceased. After the death of Aurelius, he returned finally to Pergamus, where he died at the advanced age of ninety years. He was of a delicate and sickly constitution of body; yet from his great skill in medicine, and the temperate mode of his life, he reached a happy and useful old age, when he slept with his fathers in his native city, A. D. 200.

His fame was very great; and he ranks next to Hippocrates on the roll of great and splendid men. He wrote five hundred volumes on philosophy and medicine. They were deposited in the temple of Peace, at Rome, and destroyed when that city was burned by the Goths. The scattered volumes which still remained in the hands of his friends and followers, have been collected and published in five folio volumes; when his works and Hippocrates' were published together, they amounted to thirteen folio volumes; a monument of splendor to those distinguished men, which covers the Egyptian pyramids with contempt and shame.

A pleasing melancholy pervades the soul, as we trace the memorials of those devoted and magnanimous benefactors of the human race. They seem to redeem the very character of man from all the vile aspersions, that have been cast upon it. They shine as splendid beacons, on the solitudes of time, to point the traveller the road to glory, and the haven of immortality and peace! If we were disposed to hesitate or linger in the pursuits of humanity, those bright examples would spur us on to industry and exertion.

For a long period after the days of Hippocrates, no eminent physician of Greece, at least none of known date, was found worthy to bear the torch of that distinguished mind into the temple of Hygeia. The pursuits of the healing art might languish, but did not slumber. We have sufficient testimony on the historic page, of medical studies in the East, in Egypt, and in Greece, through the long period that elapsed between Hippocrates and Galen. In Greece, the votive tablets suspended in the temple of the gods, displayed to the eyes of the student of medicine, the disease, its history, and the nature of its cure. In India, the sick were laid in beds by the way side, that every passenger might be consulted on the means of their recovery. These cures were also registered on the pillars and monuments of Eastern magnificence, for the benefit of the public. If any discovered a poison, he was obliged to conceal it, till he had also found out its antidote, and then they were publised together. This was a part of the code of wise maxims, which still distinguish the primitive regions of the human race. In Egypt, medical science progressed according to the prescribed forms, until Nectanebus, the last of the race of Misraim, was expelled his thone and kingdom, by Ochus, the tyrant of Persia, a few years before Alexander conquered the East.

ERASISTRATUS was celebrated for his skill and wisdom in the mode of cure; his medicines were mild and simple, administered with judgment and success. He was opposed to mixed and complicated medicines.

HERAPHILUS, the anatomist, held a distinguished rank among the physicians of Greece. He was so much devoted to the discovery of specifics, that it gave occasion to his disciple Philnius, of Cos, to attach himself wholly to the practice of empiricism.

The honor of having founded the *sect* of empirics, has been contended by their followers, between Philinius and Serapion, of Alexandria. It is, however, certain, that it arose immediately after the time of Heraphilus. And this period may be regarded as one of the most remarkable in the history of general physic.

HERACLIDES, of Tarentum, was one of the empiric sect; a person of great skill and judgment in the study of medicine. Very remarkable cures are recorded of him. His writings being lost, the world has not been much benefited by his discoveries.

The establishment of medicine as a separate science, at Rome, must be ascribed to the Greeks.—For five hundred years, according to Cato, the censor, it was in a very rude state, and confined entirely to the women. A luxation was reduced by incantation; and the brassica accounted an universal remedy. Asclepiades was the first of the Grecian physicians who practised at Rome. He was not bred to physic; but was a professor of rhetoric.—Not finding success in his original profession, he commenced the practice of physic, and formed a system for himself. He established a mild practice, employed few medicines, and strongly declaimed against compound and complicated medicine.

SCRIBONIUS LARGUS treats professedly of the composition of medicine; but his medicine and mode of practice, have been charged with great uncertainty and imperfection.

Superstitious follies seem to have distinguished many of these writers, as well as Pliny, the elder, and Andromachus, senior: though to the present day, the *Theriaca Andromachi*, is retained in systems of medicine.

DISDORIDES, who wrote professedly on *Materia Medica*, is regarded as one of the best and most

judicious of ancient times. Many might be added to these names, but *jam satis*: These will suffice to show the turmoil and vicissitudes in the medical science of ancient times.

LECTURE III.

AN HISTORICAL VIEW OF THE MODERN SYSTEMS OF MEDICINE.

We have already taken, on a former evening, a short and rapid view of the most celebrated physicians of antiquity—of Egypt, Greece and Rome. They were distinguished into Theorists and Methodics; as at the present day, we have the different sects of Empirics, Dogmatists, Nosologists and Brunonians, as they may be the followers of Brown or Cullen, or their predecessors.

The Methodics still adhered to the original forms of practising by rule; while the Theorists united argument and observation, after the example of Hippocrates and Galen; having still in mind the profound maxim of the former—"To *enlighten* experience by reason, and to *rectify* theory by practice, belonged to men in the pursuit of knowledge, endowed with *sense* and dignified with *soul*."

The torch of Prometheus was not all a fiction: it expressed a profound philosophical truth. The ancients were fond of having their sentiments wrapped up in metaphor and enigma. That holy light so feelingly apostrophised by Milton—

"Hail holy light, offspring of Heaven first born!
Or of the eternal co-eternal beam!"

That light was indicated by the flaming torch of

Prometheus: For the ancients, however they had obtained a knowledge of the fact, knew well that light was the *first born of heaven*. Revelation or tradition might have taught them this truth; but it was held sacred in their mysteries. They conceived light to be the grand pabulum of life, and the great agent which the Deity employed to spread organization, sensation and thought, over the inanimate mass of rude and restive matter. It was also applied to the superior splendors of majestic intellect. "*Cui mens diviniore atque os magna sanaturum.*"* Hippocrates had the high privilege and distinguished honor of having first introduced the torch of Prometheus into the leaden temple of medical knowledge—*scientific investigation*.

After the days of Celsus and Galen, medical science became stationary. In the agitation and decline of the Roman empire, all learning was arrested in its progress; and when it fell, the arts and sciences perished in the shock. The few *fragments* that remained, were concealed amongst the fraternities of priests and monks, and secular clergy. But a dreary desolation and dark decay spread over the universe of mind. *Pro dolor!* The knowledge of a few simples answered all the wants of the common people. The dressing of wounds was committed to the ladies; the cure of fractures, luxations, and *broken bones*, the knights took upon themselves. All was simple and soon despatched. In those awful scenes of broil and battle—when nothing was to be heard or seen, but the alarm of war, and garments rolled in blood; there was no time to die of disease. No! it was on the bloody field of martial strife, that Death reaped the harvest

* Whose mind was endued with divine wisdom—and whose generous and open countenance imported health.

of his millions! All the finer sensibilities, and causes of disease, were absorbed and swallowed up in the vortex of *war*! Thus, through the long and dreary night of a thousand years, a morbid melancholy, and moral death, sat brooding, like an incubus, on the nations of Europe.

At length, for man cannot be enslaved forever—at length, superstition broke her chains—science roused her giant form, and shook off the slumber of ages! The spirit of man rebounded from the crush of her long depression, and took her place on the sublime and awful elevation of *freedom*, and *range* of thought! For it is one of the most indelible characteristics of her divine origin, which the Deity has impressed upon the human soul—that she cannot be trampled down forever. In despite of the most formidable opposition—of the wrath and rage of enemies—she will arise and reassert the dignity of her own nature, and take her mighty and majestic course along the great ocean of being. Religious liberty, civil liberty, the diffusion of science, the equity of laws, and the amelioration of the condition of the miserable—all! all! proclaim her bright and rapid progress to the uncreated splendors of eternal day!

After the revival of learning, the works of the ancients were held in great repute. They were searched out and sought after, with an avidity which shewed how earnestly men were bent on the culture and improvement of the mind. Sennertus and Riverius collected with the greatest diligence the opinions and writings of the ancients; especially of Hippocrates, Celsus and Galen. Baglivi, another faithful laborer in the same good cause, is said to have committed the whole writings of Hippocrates to memory!—*Transiat in exemplum*. And all who would succeed in their professions, must

embue their very soul with the whole *subject matter* of their vocation. None can ever rise to eminence, who possesses not this enthusiastic devotion to the object of his pursuits.

Baglivi places the principle of animal life, in irritability and sympathy. He traces the doctrine of animal motions from Hippocrates down to his own time—the end of the seventeenth century. His *impetus faciens*, or, *to arche* of Hippocrates, forms the principle of his pathology; accounts for the proximate causes and cures of disease. This *first*, or prime mover, he placed in the *dura mater* of the brain; which propelled its energies along the ligaments and membranes of the body, to produce motion. His cures, like his great master Hippocrates, chiefly consisted in the cold and hot bath, frictions, cauteries, and epispasticks. A few medicines, he observes, *well directed*, are the best evidence and demonstration of the skill and abilities of the physician.

The whole of the sixteenth and part of the seventeenth centuries, were spent by Sennertus and Riverius, together with their disciples and predecessors, in teaching, expounding and commenting on the systems of the ancients. They were called *Galenists*; and their pathology and practice were conducted on the same principles and rules.

Early in the sixteenth century, the far famed Paracelsus advanced his chymical system to the world. This was directly opposed to the system of the Galenists. They however, held possession of the schools to the end of the seventeenth century. But the followers of Paracelsus acquired the patronage, and were supported by the power and influence of the learned. The Galenists were finally forced to yield; and the *humoral* and *chymical* pathology, which had agitated and divided the schools for two

hundred years, began to retire to the *shades*, and sink under a new and splendid light, which was just *dawning* on the world.

About the middle of the seventeenth century, the circulation of the blood came to be generally known; and this knowledge together with that of the discovery of the receptacle of the chyle, and of the thoracic duct, combined finally to explode the Galenic system. A considerable revolution had now also taken place in the system of natural philosophy. In the course of the seventeenth century, Galileo had introduced the mathematical mode of reasoning; and lord Bacon had proposed to the world his new mode of reasoning, by an induction of facts.—These new modes of philosophizing, as might be supposed, had soon a visible influence on the science of medicine. A disposition to observe *facts*, and make *experiments*, began to prevail in the schools, and to fix the attention of keen and accurate inquirers.

The clear view of the organic system of animal bodies, presented by the knowledge of the circulation of the blood, led not only to a deeper acquaintance with the internal structure, but also to the application of *mechanical* philosophy, in explaining the phenomena of animal life. This became the fashionable mode of reasoning until a very late period. But it has been found very *defective* in explaining the animal economy; and, although it is still partially in use, and may still continue to be used, it would be easy to show, that its application must be very limited and partial. Still, however, down till this period, the physician, whether Galenist or Chimist, was so accustomed to consider the state and condition of the fluids, both as the cause of disease, and as the foundation for explaining the operation of medicine in its cure, that they were both termed the *Humoral pathology*.

It now soon appeared that chimisty promised a much better explanation of the system, than the Galenic or Aristotelian phylosophy had done.—These were, therefore, almost entirely laid aside, and chimal reasoning every where prevailed.—Lord Bacon, with his usual sagacity, had early discovered that chimistry promised a great number of facts; and he therefore gave it credit, and covered it with the shadow of his *mighty name*.

The Corpuscular philosophy, restored by Gassendi, readily united with the reasonings of the chimists; and the philosophy of Des Cartes, with great facility, combined and commingled with both. From all these combinations and affinities, an Humoral, but chiefly a chimal pathology prevailed down to the end of the seventeenth, and even had great influence on the science of medicine, down to the end of the last century. The history of the human mind is to be traced in the language, the science, the arts, and the writings of the world. The study is curious, but is of high and holy estimation.

About the middle of the seventeenth century, arose the great SYDENDAM—the first of the moderns, the father of medical science, in its present robes of modern fashion. His writings will be esteemed a *standard*, says Dr. Cullen, as long as they shall be known, or shall endure. He did not entangle himself in the thorny paths which lead to the mysteries of animal life; his pathology was simple and comprehensive. The *oppressed* and *exhausted* state of the system, comprised his rationale of disease and mode of cure. The simplicity of his views seems to have laid the foundation for the *theories* of Rush and Brown. The morbid excitement of the first, and the *direct* and *indirect* debility of the latter—with the unity of disease, and classes of sthe-

nic and asthenic diathesis, and mode of cure, appear to have their origin in the principles of Sydenham.

To add to the science of medicine, said Sydenham, two facts must be kept in view: 1st, to give a full and complete description or history of disease; and, 2nd, to discover a fixed and perfect remedy, or mode of cure. And to these high objects did Dr. Sydenham dedicate the labors of his long and useful life; preferring their great importance, to the fruitless and unprofitable speculations, on the *principle of life*. By neglecting these desiderata, he observes, the *Materia Medica* has been swelled to an unreasonable size, filled with great uncertainty! To these obvious and valuable facts, the doctor would add the knowledge of specifics; and in consequence has been called a quack. But his fame stands too high and bright, to be tainted by the breath of scandal! He says the only specific we have, is the Jesuit bark. Calomel and sarsaparilla, are not specifics; unless it can be shown that the one does not produce salivation, and the other perspiration. He laments that the medical virtues of plants are so little known, though the most valuable part of the *materia medica*.

Organized substances are the food of animals, and as medicinal must be more congenial to their natures, than the brute mass of inanimated matter, Dr. Ray observes, we are sprung from the Earth, we feed upon her bounty, draw our nourishment from her bosom, and our healing medicines from her breast.

It must be confessed, says Dr. Sydenham, that although mineral medicines meet the indications of disease, they are not to be relied on as specifics, with the same entire confidence, as the vegetable medicines. Here is a strong testimony to the theory of Thomson.

Dr. Glisson, was the first of the moderns who paid any attention to the vital principle, and the first who mentions irritability as a property of this *vis insita*. He defines it to be a property, which, receding in all bodies, can be excited to action by irritation; that it resides in a mucus, and is perfected by heat and blood. He had no idea of the distinction between sensibility and irritability, and therefore he uses the old *distinctions* of animal, vital and natural functions. Because a muscle was seen to contract when pricked, although separated from the body, he believed the fibres and muscles had *perception* in themselves. Here again he confounds sensibility and irritability; and attempts to confirm the hypothesis, by the remark, that there can nothing be, in the intellect, but what we receive by the senses. Dr. Cullen advanced the same maxim one hundred years afterwards. Baglivi also pursued, to a great extent, his observations on the phenomena of the vital principle. Haller says, irritability is *independent* of sensibility, and *vice versa*. Glisson thought irritability depended on volition: Belloni, on the accelerated motion of the blood: Baglivi, on the oscillatory motions of the *dura mater* along the membranes; Stahl, and his followers, supposed irritation to be innate and influenced by the soul. Dr. Winter traced all human motions to fibrous irritability and stimuli; and the younger Boerhaave to the moving power of animals. Dr. Whytt believed irritability essential to motion, and was produced by a sentient principle residing in the medulla of the brain. Dr. Kirkland thought that this medullary substance was conveyed by the nerves to the muscular fibres, which caused motion. But Dr. Whytt affirmed perception was necessary in connection with all or any material substance to produce motion; while Zimmerman and Cederus

demonstrated by experiments, that irritation was as general in the *animal* fibres, as *attraction* in the universe; and was altogether separate from the mind and soul.

You see, my friends, how difficult it has been for the professors of this art, to fix upon one scheme of principles. Well might Dr. Brown say, "the science was altogether uncertain and incomprehensible, and could yield no satisfaction to his mind;" when the principles are so jarring and incoherent, the practice founded upon them must be defective, and partake in a great measure, of the uncertainty of its foundation. This was perceived and confessed by all the *faculty*.

And the new systems introduced in the beginning of the eighteenth century by Stahl, Hoffman and Boerhaave, were intended to supply a remedy. But, alas! they were equally different as they were new; and instead of removing the disorder, they only operated to its augmentation, and inflamed the wound they were designed to heal.

DR. STAHL.—His leading principle was, that the rational soul of man governs the whole economy of his body. It was observed at *all* times in the history of medicine, that the animal economy possesses, in itself, a principle or power of resisting injuries, of correcting or removing diseases, arising in it, or induced upon it. Sometimes this has been called nature's effort to throw off disease. This was ascribed by the ancients, to an agent in the system, which they called the *to arche*; and from Greece the language passed into the west, of a *vis conservatrix et medicatrix naturæ*,* and has not only continued in the schools, but has been retained in

* That the force of nature is a preservative of health, and a remedy against disease.

the heart of the multitude, to the present, and from the most ancient times; and perhaps, after all, the doctrine of dame nature is the truest part of medical theory. Dr. Stahl supposes, this power of nature so much talked of, nothing else but the rational soul; that when it perceives noxious powers threaten the body, it excites such emotions in the body as shall expel them. This theory was greatly opposed by Dr. Nichols in his *Oratio de Anima Medica*; and also by Cullen in his physiology. Dr. Gaubius, in his pathology, says it is a capricious government of the animal economy, and not to be relied on. Stahl and his followers, called *this* the Hippocratic method of curing diseases; but the wits called it the *Art of curing by expectation*.

DR. HOFFMAN.—He was professor in the university of Halle, when the doctrines of Stahl prevailed. But rejecting altogether the *Vires naturæ medicatrices*, of his predecessor, he introduced a new system, in which he blended the doctrines of nervous spasm, with the mechanical, cartesian, and chemical doctrines. These, however, he modified to suit his leading principle of disease, or spasm, evinced in his *Pathologia medulla cerebri et nervorum*. In these Hoffman placed the primary moving powers; and by considering their state and affections, he thought he could explain all the phenomena of the animal economy, in health and in sickness. Dr. Cullen says, we are indebted to Dr. Hoffman for putting us into a proper train of investigation. It was this theory which induced Dr. K. Børhaave to publish his works, entitled *Impetum Faciens*, and Dr. Gaubius to give his pathology of the *Solidum Vivum*.

It was objected to Hoffman, that he did not properly apply his own fundamental doctrine, and that he intermixed the humoral pathology of the

Galenists, and the plethora and cacochymia of Stahl—I wish I had done with these intolerable names—*De morborum generatione, ex nimia sanguinis quantitate et humorum imperritate.*

DR. BOERHAAVE.—He was a man of general erudition. In forming his system of physic, he seems to have studied diligently, all the writings of both ancient and modern physicians. He intended to be a *careful, a candid and genuine eclectic.* But, alas! he *too failed.* He possessed a *genius* peculiarly systematic; and at first gained high reputation. His system was more generally received than any former had been, since the time of Galen.

Cullen objects to this system; 1st, that, in the course of forty years, he made in it neither additions nor improvements, except in the 755th Aphorism, where the words *forte et nervosi, tam cerebri quam cerebelli cordi destinati inertia*; and these did not appear until the fourth edition; 2d, he objects to his doctrine of the simple solid, and its erroneous composition of earth and gluten; 3d, his mistake respecting the structure of the compound membranes; 4th, his neglect of the cellular texture. From all these reasons, Cullen thought his system very imperfect, and incapable of explaining the phenomena of the animal economy, in health or sickness. Cullen thinks that, on very few occasions the simple solids are either changeable or actually changed; and that, out of ninety-nine cases in an hundred, the phenomena attributed to the change of the simple solids depends altogether on the state of the *solidum vivum.* To all these, Dr. Cullen adds, that Dr. Boerhaave's morbid acrimony, and lentor of the fluids; his hypothetical and humoral pathology, to the almost total neglect of the state of the moving powers of the animal body, are cal-

culated to mislead in the practice of physic. In his aphorisms there are very few pages where error or defect does not occur; and, therefore, Dr. Cullen concludes it ought to be set aside.

Dr. Lieutaud, a French physician, attempted a system upon a new plan, which he called the *synopsis universa medicinæ*. It was to consist of a mere collection of facts and observations from experience. But this also failed; and, according to Dr. Cullen, he has only increased the confusion of medical subjects. These are *painful premonitions* to the adventurer in his dark and doubtful journey of physiology and medical science.

Dr. Cullen remarks—I have endeavored to form a system of physic that should comprehend the whole of the facts relating to the science; and that will, I hope, arrange them in better order than has been done heretofore. The affections of the motions and moving powers of the animal economy, must certainly be the leading inquiry, in considering the diseases of the human body. I have assumed, says Cullen, the general principle of Hoffman, and I have avoided introducing the many hypothetical speculations of the humoral pathology, which have disfigured both his, and all the other systems which have hitherto prevailed.—There is within us, says the doctor, a strange mixture of the material and immaterial part, *evinced* by their operations; and these are liable to very great irregularities. Hence, the laws of the nervous system are not even tolerably ascertained. We speak obscurely of it; and shelter ourselves under the general term of sympathy, spasm, &c., which are used with a little precision now, as malignity and lentor were employed of old.

Van Helmont was the first who attended to the nervous system, and advanced the doctrine of

the Archæus, as the proximate cause of disease. Several had been advancing the science of the nerves, but he says (Dr. Whytt) had done more than all the rest. He considered the subject as still far from being exhausted, and of the highest consequence to explain the condition of the body, in sickness or health. We suppose, says the doctor, that in the phenomena of the nervous system, there is a series of three conditions: 1st, an impression made on the organ of sense, or sentient part; 2d, in consequence of this, there is a perception created in the common origin of sense, *sensorium commune*; 3d, there is a motion or contraction excited in the moving fibres, which depend upon the nerves. We call these, from Gaubius, impression, perception, irritation. All phenomena are comprehended under these three. Of these three conditions, the intermediate link is perception, and on it the other two depend. This link, perception, is the foundation of all our internal operations; being derived from the immaterial power within us, and connected with our material part.

This *immaterial power* may be left out in medicine; for if contraction necessarily follows perception, and perception as necessarily follows impression, we have no more occasion to take notice of it as a sentient principle, than if it were a mechanical cause. The doctor, however, shews that impression may excite irritation, and often does, without the intervention of perception; and shows the absurdity of Stahl and his followers, by asserting that the soul is conscious of every impression. There are, says the doctor, a variety of impressions, which are not all attended to by perception; or if we perceive, it is the effects, and not the impressions themselves. As to perception, it always depends on impression; so that the old saying is

very true—*Nil in intellectu quod non fecit prius in sensu.** These impressions are varied by the *sensorium commune*, or origin of the nerves. Irritation depends constantly on perception or impression.

This system so carefully arranged, and the investigation of the nervous system conducted and investigated by him, with a success which has no parallel, has, nevertheless, been denounced uncertain, incomprehensible and disastrous. He has been charged with overlooking, or but slightly glancing at the pathology of the blood vessels, in his concentrated views of the nervous system.—And, by adopting the *nosology* of Sauvages, Linnæus and Vogel, he has, unfortunately, led physicians, says Dr. Rush, to prescribe for the names of diseases, instead of their proximate cause.

It is sufficient to jar the foundations of the firmest confidence in medical skill, to find the professors of that science, but rising, as it were, to overthrow each other, to show that a false pathology, or a corrupt practice, had pervaded the system from the origin of the science. It is, indeed, melancholy to reflect that the industry and labor of man, should be thus buried and forgotten with his bones.

LECTURE IV.

THE THEORIES OF DRS. BROWN, RUSH AND THOMSON.

It was observed by the ancients, as an argument for the duration of the soul, that this state did not appear to be the final residence of any portion of its inhabitants: that all nature was in progressive

* Nothing gains entrance to the mind but through the senses.

motion ; evidently hastening forward to some far distant centre, where it should attain the perfection of its being, and the consummation of that excellence for which the Deity had designed it.

If we apply this argument to the progress and revolutions of medicine, we may anticipate, with joyful hearts, that the perfection of its science is nigh at hand. In tracing its history, we find that almost every new professor comes forward with his new *theory*; and his proscription of his predecessors. Those incessant revolutions must ultimately terminate ; and we most ardently hope *that end* may be perfect knowledge, in the full completion of the system; that simplicity and success, a fixed and permanent mode of practice, may be universally adopted, and the wavering and contending systems be banished from the earth.

I know it has been said, in defence of this perpetual change, that every science, around which *new facts* are daily accumulating, requires, from time to time, an entire reform and renovation. But that this reform and renewal of the whole system of medicine, from age to age, should be accounted for, merely by the "accumulation of facts," and not the perversity of principles, I apprehend, will not bear the test of sound argument. Other sciences, as well as *medicine*, have been changed often; but it was professedly because their former principles were false, and not derived from facts, from experience, and observation; and not only on account of the accumulation of facts, which only serve to confirm right principles.

The symptoms, of malignant and inflammatory fevers, appear to be the same now, that they were in the days of Hippocrates; and yet how various has been the treatment since that time.

There must be *first principles* in medicine as well

as in philosophy, which are invariable and incontestible; which like the stars of the firmament, in guiding the mariner, will conduct the physician, with assured aim, through the deep ocean of human troubles. When learning revived, the physicians of Europe employed themselves in reviving the system of Galen and Hippocrates. During the course of the sixteenth century, the study of the physicians was almost solely-employed in explaining and confirming that system. Early in the same century, the noted Paracelsus had laid the foundation of a chymical system, which was in direct opposition to that of Galen. This system finally prevailed over the Galenists. But though thus opposed and contending, the explanations of both, of the phenomena of health and sickness, turned so entirely on the state of the fluids of the body, that a humeral and chymical pathology prevailed, sometimes together and sometimes apart, down to the end of the seventeenth century; and even to the end of the eighteenth, had a great share and influence on the practice of medicine.

In the beginning of the eighteenth century, Stahl, Hoffman, and Boerhaave, produced three new and different systems of physic, and mixed up their doctrines of *spasm*, of *morbid acrimonies*, of *vis naturæ conservatrix*, with the humoral pathology of Riverius, and the chymical affinities and repulsions of Paracelsus. But the *Autocrateia*, says Dr. Cullen, obtained and admitted, in some shape or other, by every sect, had corrupted the practice of all physicians, from Hippocrates to Stahl. This is a sweeping sentence, pronounced upon the *anima medica*, by the good doctor of Edinburgh. And his own *Nosology* has received one more severe and decisive from the pen of Rush.

"*Sic transit gloria mundi!*"* is forced upon us,

* Thus fades the systems and Glory of the world.

as we pass along this boisterous stream of conflicting pathology. And where, alas, shall we find rest! on what rock shall our feet settle! where shall the lovely, fleeting form of happiness be found! Some of the later philosophers of Greece, hardened and confounded by the disputes of the schools, took refuge in a universal scepticism. But let us not, my friends, despair amidst the glooms of the thickening tempest. The day will dawn and brighten, the storm shall pass away, and the bright sun of healing splendor, shine upon the world.

From the simple solids, in their state of rigidity or laxity, as a doctrine accounting for health or disease, by Dr. Boerhaave, Dr. Cullen passes off to the *solidum vivum*; and expresses his confidence, that he had seized on a clue of investigation, in laying hold of the motions and moving powers of the animal economy, more certain to detect the causes and phenomena of disease, than ever had been before discovered; for, although Hoffman had dipped into this fundamental spring of the science, he had also polluted it with his mixture of the humoral pathology.

The value of Dr. Cullen's researches, we will soon perceive, in the investigations of Brown; and Dr. Thomson himself, was never more puzzled and confounded, when he had to contend alone with the whole faculty, than Dr. Brown appears to have been, in throwing off the entanglements of Cullen's system. He studied under Cullen; he lived in his family; and he lectured on his system. But I shall give the history of his scientific progress, in his own words. "The author," says Brown, in the preface of his works; "the author of this work has spent more than twenty years in learning, teaching, and scrutinizing every part of medicine. The first five years passed away in hearing others, in studying

what I had heard, and implicitly believing it, and entering upon the possession, as a rich and valuable inheritance. The next five years I was employed in explaining the several particulars, in refining them, and bestowing on them a nicer polish. During the five succeeding years, nothing having prospered according to my satisfaction, I grew indifferent to the subject; and, with many eminent men, and even the very vulgar, began to deplore the healing art, as altogether uncertain and incomprehensible." You have here, my friends, the decision of this original mind, on the imperfection of a system that had been progressing for four thousand years. "All this time passed away," says Dr. Brown, "without the acquisition of any advantage, and without that, which of all things, is the most agreeable to the mind, the *light of truth*; and so great and precious a portion of the short and perishable life of man was totally lost! Here I was, at this period, in the situation of a traveller in an unknown country, who, after losing every trace of his way, wanders in the shades of night. Nor was it until between the fifteenth and twentieth years of my studies, that a faint gleam of light broke in upon my soul."

Dr. Brown then proceeds to detail the cause of this new beam of light which broke in upon him. He had an attack of the gout, in the thirty-sixth year of his age; his mode of living had been generous until the six months previous to his fit of the gout, during which time he had used the most sparing diet. The disease spent its force in six weeks, and did not return until after an interval of six years, and an abstemious diet of six months.

The theory of the physicians was, that the gout was caused by plethora and excessive vigor. Vegetable aliment was enjoined as the only mode of

cure. The rationale from the cure to the proximate cause, was certain; but Dr. Brown discovered that the error lay in the proximate cause, and of course must defeat the remedy. For during a whole year of strict adherence to the prescribed regimen, he suffered four severe attacks. In short, he says, the whole year except fourteen days, was spent between limping and excruciating pain. Upon this experience, and these facts, he constructed his new theory. Why, when he lived well, was he exempted from the disease, and when dieting himself was he attacked in a manner so formidable and unrelenting? The solution of these questions opened his eyes, and led him forward to an inquiry more comprehensive. What is the effect of food, drink and the aliment which support life? They produce strength. What is their effect afterwards? Always less and less. What is it towards the end of life? So far from giving strength, they prove weakening. And finally, the very powers which support life at first, prove its destruction at last; but generally through the intervention of disease.

From this process of reasoning, he perceived that his disease was occasioned by a deficiency, and not a redundancy of blood; that debility was the cause of his disorder, and the remedy must be sought in a sustaining and stimulating diet—this he called *direct debility*. Such was the success of this new practice, that for two years he had only a very slight attack; and this soon yielded to increased stimuli. He computed from these data, that the disease was alleviated in the proportion of forty-eight to one. A young gentleman living with the doctor at the same time, and suffering under asthma, in consequence of the same treatment, had only one fit in two years, instead of one every day, while he pursued the common practice. This

mode of practice he found successful, in the putrid and gangrenous sore-throat, in rheumatism, inflammation of the joints, and all chronic rheumatism, and the inflammation which attacks the brain after typhus fevers, dyspepsia, convulsions and the diseases of children. All these, yielding to the stimulating medicine, he concluded they were asthenic. For seven years he was able to repel the fits of the gout by this mode of practice.

Led by the hand of nature, the doctor says, he walked round the whole circle of *asthenic* diseases, and found that they were all cured by the same remedy, stimulants.

With regard to the *sthenic* diseases, the cause and cure of which he says, nobody understood, all their symptoms were mistaken and the practice wrong. I will, once for all, explain these terms of the Brunonian system.

Sthenic diathesis—diseased habit of body, occasioned by excess of stimuli, called indirect debility—oppressed state of the system.

Asthenic diathesis—diseased habit of body, occasioned by a deficiency of stimuli, called direct debility—exhausted state of the system.

The former was to be reduced by depletion; the latter by repletion. The Egyptians, in the corn country, purged and vomited themselves every month, three days in succession, notwithstanding they were the healthiest people in the world.

Dr. Brown reduced all general or universal diseases to these two forms, *sthenic* and *asthenic*; enlarged his plan; accounted for the symptoms, and reduced the whole to a certain principle. An universal disease, he says, proceeds from an affection of the principle of life—but a local disease, from a local injury. These three states, *health*, *disease*, and *predisposition*, constituted the life, or living

state of animals. From thus ascribing all diseases to *excess* or *deficiency*, he directed his remedies to the reverse states of the body; and shewed that the noxious powers which excited either, were the remedies of the other. He laid down the same doctrine in regard to plants; and finally demanded, whether the medical art, hitherto *conjectural*, *incoherent*, and in the great body of its doctrines, *false*, was not at last, reduced to a science of demonstration, which might be called THE SCIENCE OF LIFE? A question which has been answered in the affirmative, says his biographer, by every one who has been at due pains to understand the doctrine.

BROWN'S THEORY.

1st. To every animate being is allotted a certain portion of the principle on which the phenomena of life depend. This principle is denominated *excitability*.

2d. The exciting powers are the external and internal stimuli. The former are heat, food, wine, poisons, contagions. The latter, the functions of the body itself—contractibility, thought, emotion and passion.

3d. Excitement is the *effect* produced by the action of the exciting powers on excitability.

4th. Life is a *forced* state; if the exciting powers are withdrawn, death ensues, as certainly as if the excitability was gone.

5th. By too great excitement, weakness is produced, because the excitability becomes defective. This is *indirect debility*. When the exciting powers are withheld, weakness is also induced, and this is *direct debility*. Here the excitability is in excess. *Ergo*, when the excitability is *defective* it produces *indirect* debility; but when the excitability is in *excess*, it then produces *direct* debility.

6th. Every power that acts on the living frame is a stimulant.

7th. Excitability is seated in the medullary portion of the nerves, and in the muscles.

Dr. Christie has illustrated this theory of Dr. Brown, by a familiar similitude. Suppose a fire to be made up in a grate filled with fuel, not very combustible; and a machine placed before it, containing several tubes pouring constant streams of fresh air upon it. Suppose another pipe, fixed at the back of the grate, through which a constant supply of fresh fuel was poured into it, to supply the waste occasioned by the flame.

The grate is the human frame; the fuel in it, the matter or principle of life—the excitability of Dr. Brown, and the *censorial power* of Dr. Darwin.—The pipe behind the grate pouring in fuel, is the power of the living system to regenerate itself; or reproduce excitability; the air machine with several tubes, is the various stimuli, acting on the body; and the flame is the phenomenon of life.

Thus the curious and comprehensive system of Dr. Brown, is summed up briefly in this plain similitude; to which is added this further illustration: As life is a forced state, according to the doctor, it is said, where one tube of the machine pours in pure air—this signifies the highest degree of stimulants: when common atmospheric air, the common stimulants of food, drink, &c.; and when impure air, it indicates the sedative powers, as poisons, putrefactions, marsh miasmata, foul air, stagnant water, &c. From these few examples, it will be easy to comprehend Brown's Theory. The more a spark is blown, the brighter it burns, and the sooner it is spent. This sage saying, exemplifies what is remarked by Dr. Brown, when he affirms, that the stimulating powers support life, and at

the same time consume it, because they waste the excitability; therefore, the necessity of sleep, when all the exciting powers are withdrawn, to give the living principle time to accumulate its excitability.

In a very few years, notwithstanding the opposition made to Brown's theory, it spread with rapidity over England, France, Italy, Germany, Holland, and America. Even those who rejected his doctrine, were nevertheless influenced and benefited by his practice. It has been so with Dr. Thomson: The vapour bath was a poor attempt to devise a substitute for his method of steaming.

When Lavoisier first announced his system, the Chimists who were the most scandalized by it found themselves obliged to revise their whole congeries of facts and deductions. The immediate consequence was, an entire change in their opinions.—They were forced to shift their foundations; and though they disdained to go over to Lavoisier, they could no longer adhere to Stahl. They were obliged to abandon half their errors; and no doubt a thorough lustration in medicine will be forced upon the faculty, by the curious discoveries of these latter years.

DR. RUSH'S THEORY.

With Brown, he affirmed, 1st, *Life* to be a forced state.

2d. Life, as applied to the human body, included *motion, heat, sensation, and thought*—these four, when united, compose perfect life.

3d. Every part of the human body, nails and hair excepted, is endowed with sensibility and excitability. *Sensibility* means, the power of having sensation excited by the action of impressions; *excitability*, the power of having motion excited by means of impressions.

4th. The human body is so formed, that if impressions be made upon it, in its healthy state, in one part, it will excite sensation, or motion, or both, in every other part; hence, the body is a unit—*ergo*, disease is a unit.

5th. Life is the effect of stimuli acting on the *excitability* and *sensibility*, which are extended in different degrees over every part of the body.

Dr. Rush agrees with Dr. Brown, that life is a *forced state*, and the effect of stimuli. He divides these the same as Brown, into external and internal. But for the matter or principle of life itself, he adds sensibility to Brown's excitability. He will not admit with Brown, that debility is *disease*, but only a *predisposing cause* of disease.

Disease *consists* in a morbid excitement, and the *cure* of disease consists in restoring the equal diffusion over the whole body. He blames Cullen for inducing his students, by his nosology, to prescribe for the names of diseases, instead of their proximate causes; and Brown, he affirms to be equally faulty, for reducing them nearly to one class, and accommodating his prescriptions to the reverse states of the body, or to that which constitutes their proximate cause.

Air, by exciting respiration, gave the first impulse of life. When man was formed, God breathed into him the breath of life—that is, says the doctor, atmospheric air—dilating his nostrils, inflating his lungs, and thus excited in him the whole phenomena of *animal, intellectual and spiritual* life! And hence, life is the *effect* of stimuli acting on an organized body.

DR. THOMSON'S THEORY.

All bodies are composed of the four elements—*earth, air, fire and water*. Earth and water con-

stitute the solids, and air and fire, the fluids, of the body. The *healthy state* consists in the proper balance and distribution of these four elements, and disease by their disarrangement. All disease is caused by obstruction; the mode of cure is to remove it by diffusing heat over the system—for *heat* is life, and *cold* is death. All disease is the effect of one general cause, and therefore requires a general remedy. Whatever supports the internal heat and directs the determining powers to the surface, will expel the disease, and save the patient.

Through the long experience of thirty years, Dr. Thomson thinks he has discovered those medicines, and that mode of practice, which will accomplish this object. He has tried them on the most hopeless cases, and still found them effectual. Indeed, such was the nature of his trials and difficulties, that he was only called in to the aid of the patient, when given over to death by the other physicians. The progress of his skill was therefore *tested* by a succession of the most desperate and deadly maladies.

If it be objected to his system, that the four elements composing the human body, are not a correct enumeration of primary substances, I reply that it is the most *simple, obvious* and *ancient* distribution of the primary elements. It was Aristotle's division, and that of many other celebrated philosophers. Indeed, it is not long since the physiologists and chimists began to add to the number of primary elements. From seven, to nine, and forty-six, they have summed up the number at different times; but they are not now sure whether this last number should be enlarged or diminished. Indeed, they confess that the real, simple, elementary principles of matter, will never be discovered. The natural division of Thomson, made in times of old, answers

all the purposes of his system, and the operations of his healing skill.

The assertion, that *heat is life*, is, at least, equally as philosophical as the affirmation of Dr. Rush, that *motion, heat, sensation, and thought*, when united, compose perfect life. His cause of disease, being ascribed to obstruction, seems to amount to the same as Dr. Rush's morbid excitement; and that *cold is death*, is about equal to the extinguished excitability of Dr. Brown.

The conclusion of the whole matter is, that Dr. Brown perceived, that the systems of medicine were too complicated, and, therefore, uncertain and false in many of their principles. He, by a close attention to facts in his own case, discovered a method of curing disease, at once simple and comprehensive, extending to all cases. Dr. Rush understood well the value of his new mode of reasoning; and though he has added sensibility to the system, he has not much improved it. Brown is more philosophical than Rush; for he gives the principle of life merely a name, which serves his purpose—Excitability—without pretending to say what it is—whether a substance, or quality of substance.—He says it is a *somewhat*, which he cannot pretend to explain. And this is surely better than to make life the mere effect of the united action of organization and stimuli.

Dr. Thomson might only intend, like Dr. Bown, to express by the phrase, *heat is life*, the unknown *somewhat*, which he could not describe; and, that *cold is death*, he might only mean an effect of death. *Cold*, is generally considered a negative term, to express the absence of heat. Dr. Ray says, it is the effect of a condensed or cold ether, from which heat has been expelled. Plato calls it a fluid of gross particles, which presses upon and stops the

pores of bodies, excluding heat. Life is a metaphysical subject, and cannot be investigated by the laws of physics. This preposterous mode of reasoning has led to all the absurdities uttered on this sublime theme.

Dr. Thomson, in calling *heat* life, has more philosophy on his side than people imagine, or than even he himself is aware of. *Light, heat, and fire*, are only the same substance, in different states or conditions, and acting in a different manner. They are all signified by the same word in Hebrew and Greek, also in the Latin.—“Some of the Ancients affirmed, that light gave an organization, sensation, and thought, to the primitive chaos, and is the pabulum of all living things. It is the purest, brightest and most beautiful of all that we behold, of the works of the Creator.” Plato, in *Timæus*, asserts that fire and heat beget and govern all things. He accounts for the animal functions, from air and fire joined, acting through the whole body; fire expanding within, and fire compressing without. The Abbe le Pluche says, there are about three fluids, which, by their continual activity, cause all motion these are *fire, light, air*; and they are the breath of life! These active agents the Heathen held to be intelligent, and the gods that govern the world. Fire and air, they called the active moving powers, and earth and water the passive elements.

These opinions correspond with Dr. Thomson, who thinks with them, that the circulation of the blood is caused by the expanding power of heat within, and the compression of air without. The activity he has assigned to them agrees with the most reputed systems of ancient philosophy. An egg cannot hatch, says Dr. Ray, without air and heat. They have absolute dominion over all things. The circulation of the blood is from internal heat,

and the external air pressing into the lungs, they serve as a pump to draw the blood from the heart, and the air keeps this pump in motion. The air is to the body, what the weight is to a clock, and the heart, with its valves, acts as a pendulum to regulate its motions.

We now perceive, from these few examples of ancient and modern opinions—and they might be greatly enlarged—that Dr. Thomson has not given too much importance to *heat* and *air*, in his theory; or, if he has erred, it is in great society, and with long established maxims of profound reason and careful observation.

Dr. Thomson says, food and medicine are in harmony with each other; they grow in the same field, and are gathered by the same people. Dr. Ray remarks, we derive our food from the surface of the earth, and it also contains our principal medicine.

In accordance with the sentiments of the philosopher, on the beneficial results of misfortune, Dr. Thomson was forced into his career of medicine, and pressed forward till *triumph* crowned his struggles, and wealth repaid his toil. From the vale of obscurity he has risen to take his rank among the benefactors of the world.

LECTURE V.

MEDICINE, AS IT IS TAUGHT IN THE SCHOOLS.

WE must survey the whole extent of a science, in order to understand the value and relation of its integral parts. When we know the extent of an evil, we are more resigned to our lot than while

the subject remains doubtful. The mind winds up her powers to the contest or the endurance, and displays an *extent* of energy and resolution, which the man, before, never even dreamt that he possessed. And so it is with science. When we have surveyed its outline and mighty range, we are then prepared to meet its most threatening aspect, and grapple with its formidable strength. There is a fortitude of *soul*, distinct from that physical fortitude which braced the Nemean Lion's nerve, and I am persuaded that it is from the lack of the former, that many men are deterred from encountering the difficulties of science, and facing that *imposing front*, that would soften into a placid smile before the energy of perseverance. I have known a boy to *weep*, and abandon school forever, because he could not solve a *single* problem; though formerly he had been considered one of the smartest in his class.

I shall now hasten to give you a brief view of the several parts of medical science, as it is taught in the schools, and embraced by the literati of that profession.

The *Institutes of Medicine* are divided into *physiology*, *pathology* and *therapeutics*.

1st. Physiology* comprehends the laws and functions of the human body, in its healthy state.

2d. Pathology† describes the *remote predisposing*, *exciting* and *proximate* causes of disease.

3d. Therapeutics‡ contain an account of the nature and operation of medicines, in the cure of disease. To these divisions we may add,

4th. The Clinical Lectures, which comprehend the method of visiting and examining sick people, and the knowledge to be derived from attending

* Derived from phusis—nature, & logos, discourse.

† Pathos, disease; and logos.

‡ Therapeuo—to cure.

the bed of sickness. A register kept of the diseases and remedies of clinical patients, forms an item in this part of the study.

I. *Chimistry*.—The analyzing of substances, to discover their nature and composition.

II. *Materia Medica*.—This study comprises the whole volume and extent of the *number, name, nature and use* of medicines—*mineral, vegetable and animal*.

III. *Pharmacy*.—To know the aspect, admixture and clinical qualities of the various medicines, the student *must* apply to the Apothecary's Art; or study under a practising physician who prepares his own medicines.

IV. *Botany*.—The science of the vegetable kingdom; which is the foundation of one part of the materia medica. To know the class and family and name of plants, and their medical virtues, is of high importance.

V. *Natural History* is another part of the science, intimately connected with the former, and affording so many facts and illustrations, that no eminent physician will neglect to acquire it. It is delightful to the intellect, and useful in the department of medicine.

VI. *Anatomy*, which is the science of *organization*, as *physiology* is the science of Life; and is the foundation of *Surgery*, and the most important item in the pathological department—must be *carefully* studied.

VII. *Surgery*, which is the practical part of anatomy, requires *great attention*; a *firm hand*, a *fixed eye*, and *determined soul*, are absolutely necessary in the manual operations of surgery. For want of these, I saw a *patient perish* under the hands of one of the most skilful of surgeons. His nerves trembled, his hand shook, and he was forced

to desist in the midst of his operation. The operation was upon the windpipe, to extract a substance that had entered. The patient *expired*.—And when we add too all these, the science of

VIII. *Obstetrics*, you will perceive that the medical profession commands a most extensive and boundless field. No idler can be, or ought to be, admitted into this laborious vineyard. For it is no matter, in the language of Dr. Rush, whether acting under the cover of a *diploma*, or the pompous folly of an advertisement—if they are idle, they are equally empirics, and are only calculated for incomparable mischief!

A few remarks on these different parts of medicine, shall close this lecture.

The investigations of physic are not only peculiarly interesting to the physician, but they are eminently so to all mankind. For, an acquaintance with the nature of human *life* and *health*, and their various states and affections, is undoubtedly of greater moment and importance to us all, than any other *natural subject*. The religion of the *bible* is *supernatural*. For, although by this knowledge, men may not become *adepts* in the art of *healing*, they may yet guard and defend themselves from much misery and disease.

There is, in all *living* animals, a principle, the effects of which are very visible and obvious to all men. During its presence there is *life*—in its absence, *death*. This we denominate *vitality*, or the *living principle*. It is infused by the Supreme Being, and is the work of *his hands*:

“He is the father of Spirits.”

It is neither the *dura mater* of Baglivi; nor the *Medulla* of Haller; nor the *nervous fluid* of Hoffman;

nor the *ensorium* of Darwin; nor the *excitability* of Brown; nor the *excitability* and *sensibility* and *stimuli* of Rush; no! nor the *heat* of Thomson; but the living spirit which is made and implanted in the breast by the Almighty. All these that I have enumerated, and ten times as many more, that I might enumerate, are the mere effects of the vital principle, which have been so *egregiously* mistaken for the *principle* itself. It is very easy to distinguish a living dog from a dead lion. The most stupid can perceive this. And yet the most learned *cannot explain* the intimate nature of that living principle, which has forsaken the one and animates the other.

But, although we are equally ignorant of the principle of life, as we are of the principle of gravity, yet their effects are abundantly obvious to reason and experience. And, when we have collected and digested the various modes and operations and phenomena, which life exhibits, under all the aspects of *health* and *disease*, by careful observation, experience and reason, the *sum total* may be called the philosophy of life.

Animal life, as it operates on the human body in health and in disease, has been considered the primary and grand object of the attention of the physician. And some of its most obvious properties are sensibility, irritability and excitability. These are the *effects* of vitality, which have been mistaken for *vitality* itself.

Some physicians have supposed that the vital principle may lie dormant in a quiescent state, like *latent* heat, and afterwards be made to shew itself, like heat, by the application of stimuli. But the reasoning is fallacious; it is merely analogical—drawn from a material subject, *heat*, to prove the phenomena of an immaterial subject, the *spirit* of

life. It would be better reason, to attempt to prove that the spirit is *latent*, when the body is dead, because we cannot perceive its effects, than to attempt to establish from latent *heat*, a latent state of mind. For, if in fainting or catalepsy, it can be established that the spirit is merely latent—it may as well be latent in the grave to the day of judgement: for, in the argument respecting an immaterial *substance*, whose very essential quality is *activity*—and without which it could not be—the *latency* of one hour, or *one hundred thousand millions*, could not at all change the conditions of the question; nor relieve the disputant from the direful consequences of making the soul a material *substance*.

I know some physicians distinguish between the rational soul and the vital principle of animal life. But the distinction is, perhaps, not clearly understood. There is in animals something far superior to mere vitality. A *plant* has *vitality*—its *life* and *death*. And Dr. Brown's theory was applied, with great success, to plants, and supported them with superior energy and vigor, in the high latitude of Scotland! But, in animals, besides vitality, we perceive *thought, reason, memory, design* and *perseverance*, with a great number of the noble passions which animate man—*love, gratitude, affection, friendship, grief* and *bitter woe*, even to the destruction of life.

A very eminent and pious philosopher considered these phenomena, as the operation and agency of God, moving and directing his own universe to the final issue and grand result of the eternal judgment. This, by the way, is a very old opinion, and has been beautifully embodied by the poet, in these celebrated lines;

"All are but parts of one stupendous whole,
Whose body *nature* is, and God the soul;
That, chang'd through all, and yet in all the same,
Great in the earth as in the etherial frame;
Warms in the sun, refreshes in the breeze,
Glow's in the stars, and blossoms in the trees;
Lives through all *life*, extends through all extent,
Spreads undivided, operates unspent;
Breathes in our soul, informs our mortal part,
As full, as perfect, in a hair as heart;
As full, as perfect, in vile man that mourns,
As the rapt seraph that adores and burns,
To him no high, no low, no great, no small;
He fills, he bounds, connects, and equals all!"

This is not the doctrine of Spinoza, who made God the *soul* of the world; but the pious doctrine of a universal providence, and the omnipresence of the Deity in the government of the world. Look at the smallest plant or insect; you behold him there, in his matchless wisdom and sustaining power—forming the mechanism and moving the vitality of a creature so small and inconsiderable, and apparently worthless in the great sum of things. The Psalmist took a most striking and comprehensive view of this sublime and glorious theme. "Whither shall I go from thy spirit! Or whither shall I flee from thy presence? If I ascend up to heaven, thou art there! If I make my bed in hell, behold thou art there! If I take the wings of the morning, and dwell in the uttermost parts of the sea, even there shall thy hand lead me, and thy right hand shall hold me. If I say, surely the darkness shall cover me, even the *night* shall be light round about me!"

This was the true sentiment and doctrine of the ancient philosophers—the presence and superintendence of the Deity every where. They were not

Atheists, although the miserable Spinoza wrested their doctrine to his own malignant and deadly purpose. But he might well do that, when he turned the Jewish Scripture to the same account—for he was a Jew, and deeply read in the Old Testament. But the *wasp* can extract poison from the flower: So did his perverted *soul* draw death from the wells of salvation!

As the doctrine of *life* and *health* cannot be known by reasoning *a priori*; but must be deduced from experience and observation, some very eminent men have thought that its laws and principles should be divided in a different manner from that of the scholastic mode: That so many divisions of the theory of life and disease, which have prevailed since the days of Galen, have not only embarrassed but bewildered the subject; and that the laws and principles, therefore, should be divided in a different manner—1st, that the human blood is the recipient and vehicle of heat and life to the several parts; 2d, from many experiments, *pure air* appears to be the pabulum of irritability; for the absence of pure air destroys life sooner than the defect of any other natural *substance*; 3d, the next in importance to the animal economy, seems to be the nervous fluid, or the medulla of the brain and spinal marrow; for they have all the same nature and origin; 4th, sensibility, residing in the organ of sense, connecting the mind with the external world.

The term *Physianthropy*, has been devised for the purpose of expressing, in one word, the healthy, the morbid, and the curative nature of the vital actions.

Pathology has been also subdivided into *Semiology*, or the doctrine of symptoms; and *Nosology*, or the names and division of diseases into their *genera* and *species*: A most tedious and terrible

array, for the head of the poor disciple of Esculapius. Dr. Rush has here great merit in banishing nosology from the walks of medicine. You have only to imagine the dilemma of the practitioner, looking, in silence, on his suffering patient, until the disease would develope itself, that he might understand its nature; for this was necessary before he could prescribe. Dr. Rush laid, at once, his finger on the pulse, and directed, without delay, *depletion* or *stimuli*. This short and sudden process gave opportunity of routing the enemy (as the doctor used to say) before he had time to entrench himself in the human vitals!

Therapeutics do very well to express the *curative* indications. But it has been often suggested that the above terms have been considered too much as separate subjects of pursuit, and independent of each other; and are used often without due consideration, in the antiquated and *scholastic* manner.

All these, *Pathology*, *Semiology*, *Nosology*, *Therapeutics*, depend on physiology—as it depends on anatomy. For no principle or mode of action of the human body, in health or in disease, can be either learned or understood, without an accurate acquaintance with physiology.

Medicines, says Dr. Hoffman, contain no incoherent principles of action in themselves. They do not act on the dead body, said Hippocrates, and their action on the living body depends on the state in which they find it, whether torpid or irritable, strong or weak; and it is the same with all parts of regimen, food, drink, air, exercise or any other.

This is sound philosophy, and has been illustrated by Dr. Cullen, on sensibility and irritability. *Sensibility*, when often excited, becomes dull and loses its force—thus, a dose of opium, if continued a few days, must be increased, or it will have no ef-

fect. On the contrary, *irritability* augments by being excited. If an emetic be repeated for several days, the dose must be diminished; the irritation of the stomach will not bear the original quantity. It must be diminished daily.

Medicinal substances may be understood perfectly in their chymical properties, as they are by some apothecaries, and yet we may be perfectly ignorant of them, in their physical operations on the human body. This distinction will show that Dr. Thomson, without a *knowledge* of chemistry or botany, may know the physical operation of his medicines better than the most profound chemist. For this knowledge must be learned by experience and not in the dust and toil and retirement of the schools. Hippocrates has given us the clue; medicines affect the body according to the state in which they find it. The state or condition of the body, and the operation of the medicine on that state, we commonly learn, as Thomson learned it, by experience.

Dr. Brown, by reducing all diseases into two classes, *sthenic* and *asthenic*, ascertained, at once, to which class the complaint belonged, on visiting his patient, and proceeded accordingly to remove the debility.

Dr. Rush, by making disease a unit, caused by morbid excitement, and its *state* or condition to be ascertained by the pulse, would decide with equal facility on the mode of cure—equalize the excitement.

Dr. Thomson, by making disease the general effect of one general cause, *obstruction*, has fixed his remedy, like the others. Remove the *obstruction*, is his cure: Remove the *debility*, was Dr. Brown's cure: Remove the *morbid excitement*, was Dr. Rush's cure: and all by different stimulants,—

The *debility* was removed by diffusive stimulants:
 The *morbid excitement*, by diffusive stimulants:—
 The *obstruction*, by diffusive stimulants.

These gentlemen, though they have travelled on far diverging paths, yet, at the end of their journey, have met almost in a single *point*. They began their career together about the end of the last century; and, before the middle of the present, it is impossible to say what may be the estimation in which they shall be held by the world; or the cures effected by their discoveries.

I am not one of those who think wisdom is to be obtained by *idleness*, or gained by chance; and yet I know that some of the most *valuable* discoveries in the world, have been made in obscurity, and have sprung, as it were, from fortuitious—not that I believe that there is any thing absolutely fortuitious—but to humble the pride of man, who is too apt to lean on the might of his own arm, and ascribe to himself the merit of great discoveries. The Deity concedes them to the humble and illiterate, while they are withheld from the proud aspiring *sciolist* or doctor of the schools.

Let those who despise Dr. Thomson and his discoveries, because he is, or was, poor and unlearned, remember the words of him who knew the heart of man, and has left us an admonition that should sink us into the very dust: “I thank the O, Father, Lord of heaven and earth, because thou hast hidden those things from the wise and prudent, and hast revealed them unto babes.”

LECTURE VI.

IMPROVED THEORY OF MEDICINE.

If we wanted additional proofs of the necessity of Divine Revelation, to direct us in the way of truth, we have them in abundance, in reviewing the

different theories of animal life, suggested by medical writers. Walking with *them*, we have to explore a wilderness, dark and trackless, and interminable as the *terra incognita** of ancient days.—But, when we turn to revelation for an account of life, our minds expatiate in a boundless field of heavenly light, survey objects in the reality and spirit of their being, behold prospects of truth and glory and magnificence, where the mere light of nature could never penetrate, nor the rays of human wisdom shed their radiance.

I know the mind of man possesses creative powers and transcendent faculties, the limits of which even he himself has never ascertained. Yet his utmost art and skill, exerted with all the ardor and daring flight of genius, will never enable him to penetrate the mysteries which God has *hidden* in himself; and *life* is one of them. But the rays of revelation have beamed upon it, and showed us its origin and end. It is neither atmospheric air nor any other material thing which man can analyze. The inspired Elihu has described it in language lofty as the theme. It is the spirit and breath of the Almighty. “For, if he gather unto him his *spirit* and his *breath*, all flesh would perish together, and man return to his dust.”

If men of science would give more attention to the study of the *living oracles*, they would discover many truths, find out many mysteries, which are unfolded and displayed on the awful pages of that book, sealed with the seven seals, which they in vain endeavor to discover in the volumes of human wisdom. Life and immortality are brought to light by the Gospel. The most learned and wise of the ancient Greeks, bewailed their ignorance

*Undiscovered continent,

and their uncertainty of the nature and condition of a *future* state of existence. No *no light of nature* could pour its blaze through the dark, impenetrable glooms of the grave; no light of life, for them, had ever irradiated the horrid mansions of the dead. From the cold repulsive embraces of the king of terrors, nature had no refuge and furnished no remedy. When we behold a Darwin laboring to confound himself and his followers by a hopeless atheism, and sink them to the rank of *reptiles*, we pause to admire and reverence the wisdom of those ancient sages who sighed for immortality, although their hopes were doubtful, and their evidence feeble and fluctuating.

In reference to their anxiety and their condition, the Saviour said, as a reproof to the Jews, "many prophets and righteous men have desired to see those things which ye see, and have not seen them." What a sad and solemn reproof which applies with equal force to infidelity to the present hour. For, if the investigations of *mind*, of *physiology* and *anatomy*, were carried on with that spirit of liberal and subdued philosophy which bows the soul to the behests of heaven, how rapid would be the advancement in those pursuits; and how different would be the results from the current course of the present achievements and speculations in which professors appear, like the Roman gladiators, on the arena of combat, only to hew each other down?

Galen was converted from atheism by the study of anatomy, and wrote a hymn of praise to the Deity, to celebrate his wisdom and power, in the admirable structure of the human form. Having observed the exact distribution of the nerves to the muscles, the arrangements of the *face* for expression and beauty, the structure of the *bones* for strength and motion, he exclaims, "*Hæc enim for-*

tunc sunt operæ!"* &c. Galen having substantially refuted the Epicurean principles of Asclepiades, by showing his ignorance in anatomy and philosophy, and by demonstrating all the causes to be evidently in the works of nature, viz: *final, efficient, instrumental, material and formal*, concludes thus, against his fortuitous atoms: "*Ex quibus intelligi potest, conditorem nostrum in formandis particulis unam hunc sequi scopum, nempe ut quod melius est eligat.*"† The skill of that ingenious and famed heathen, in his illustration of the mechanism of the fingers, is most admirable. The reason which he gives for the different lengths of the fingers, is, that the tops may come to an equality in grasping round or spiral objects, which makes the hold firmer. "*Cum magnas aliqua moles in circuita comprehendunt et cum in seipsishumidum vel parvum corpus continere, conantur.*"‡—GALEN, l. XI. c. 7. g. l. i. 6. c. 13. l. i. 14.

It has been observed, that nature presented one continued series of composition and decomposition, still going forward within us, and without us: That all material things are sinking in decay, to rise and reappear in new and renovated beauty; and having reached their acme, descend again into the dust, to spring once more upon the face of day, in varied and endless progression. This ceaseless mutation has been considered the most formidable obstruction to a fixed and permanent system of medical science. Dr. Barnwell remarks, It must be allowed that we are not yet in possession of scienti-

*These are the productions of divine wisdom.

†From which we arrive at this conclusion, that our Creator, even in the formation of the least particles of matter, had or followed but one design—that whatever was best he chose.

‡When they grasp large objects—and when they seize upon small and moist bodies—the use of each finger is equally exerted and felt.

fic proofs or analytical demonstrations of medical rules and observations, so that we might reduce them to first and general principles. Our indications for ascertaining their reality, are not sufficiently established; and, consequently, have had hitherto only a technical, not a scientific meaning.

Medicine, he says, considered as an art, is still in its infancy—an assertion which no candid and intelligent practitioner will attempt to contradict, even for the most valuable therapeutical or dietetic discoveries and improvements. We are more indebted, he continues, to accidental observations and analogical conjectures, than to an established scientific theory. The *modus operandi* of medicines, as well as regimen, are so far obscure, that the whole difference between the rational prescriptions and those which are termed specifics, depends upon the application of rules by which the technical application of the remedy is, in every instance, determined.

Notwithstanding these defects in medical science, there is a constant and strong desire in the human mind to reduce all the phenomena of animal bodies to *general* principles, and to explain from these by scientific deductions, the most suitable technical methods, not merely in an empirical, but a philosophic manner, to vindicate our medical treatment, says Dr. Barnwell, *a priori*, by the general laws of nature; and thus to effect the gradual, though indissoluble connection between the scientific theory and practice. And to this object every scientific mind, in the pursuit of a correct theory, should be directed. If we had evident and sensible marks, and accurately defined terms for every degree of variation of the human body from the state of perfect health, the practice would become a far more easy and more certain study.

Dr. Sydenham first suggested something of this nature. And an endeavor to attempt something in this way, is the object of the present work, or new theory proposed by Dr. Barnwell. Thus, the theory and practice of medicine, from not only Sydenham to Barnwell, but from Hippocrates to Stahl, in the language of Cullen, have been defective and corrupted; and from Galen to Cullen himself, in the words of Brown, uncertain, unsatisfactory and incomprehensible!

All these defects and difficulties have suggested a change in the plan of medical study, and the necessity of a new theory. In order to do this, it is said that, as medicines possess no *inherent* medical virtue in themselves, and are of no use, but rather pernicious, except as they are properly applied to the various states and conditions of the living body; therefore, a thorough acquaintance with the body, in all its varieties and phenomena, in health and in sickness, constitutes the *beginning*, the *middle* and the *end* of physical medical studies: But, as the human body is continually surrounded and acted upon by other physical and mental causes, we must extend our researches to them; always keeping in mind the *cui bono*, lest we wander in useless speculation and waste our days in idle labor.

Physianthropy, or the knowledge of the nature of man, ought to be the basis of all medical science; consequently, it should comprise the natural philosophy of the human body, its principles, laws and properties—as anatomy does its structure and organization. It should exhibit the immediate application of the doctrines of organic animal nature to man in particular, and to the relation which his structure and economy bear to *mind*. The relation between animate and inanimate, must be diligently attended to.

PHYSIANTHROPY, CONSIDERED IN ITS SEVERAL PARTS AND RELATIONS.

To consider man in a physical light, the philosophy of the human body is the first and most necessary division of medical science; second, those things which act upon him, or in any manner affect his physical existence.

To the first of these divisions, belongs the due exercise of all the functions with ease and regularity; and in this consists health.

To the second, belongs the record of all the variations from due health to intricate and complicated disease; and these diseases must be investigated in their causes—remote, proximate and exciting. The variations from health to disease, in all its grades, we will find to be partly owing to a variety of conformations and combined action of habits, states, temperaments, external causes of various kinds—as aliments, air, regimen, infections, or accidents of several kinds.

Third, we must consider the different remedies for all these maladies, whether externally applied or taken inwardly: Fourth, the intention for which we apply them; and, fifthly, their modes of operation. These constitute human physics, or what may be properly denominated physianthropy. In this physianthropy, or improved theory of medical science, you are presented, in the first place, with,

1st. The philosophy of the human body; embracing the due exercise of all its functions with ease and regularity.

2d. The stimuli; or all things which act upon the body, so as to produce the variations from health to disease; either as remote, exciting or proximate causes, in producing disease.

3d. All the remedies for those diseases, wheth-

er internal or external, properly digested and arranged.

4th. The intention for which they are applied, or end to be accomplished by them.

5th And finally, their modes of operation on the system to be carefully marked and recorded.

The philosophy of the body, then, is to know it in its healthy state; to know all things which act upon it to change that state of health, and the *reason* why they do change it. The remedies must be known, external and internal; the intention for which they are applied, and the *modus operandi* recorded.

This is certainly an improvement; in so far as it renders the objects of study more condensed and distinct, and presents to the mind a more specific object of pursuit. In its application, this science would assay to begin where physicians have commonly left off, and to build its bulwarks upon the experiments and observations of health, of diseases, and of their remedies upon the whole practical phenomena; and from them, draw the rules or laws of the human frame, as it is acted upon by other agents in nature, as well as mental causes: and again apply these rules and laws to practice.

It was a scheme of study constructed after this manner, that Lord Bacon recommended in physics; and the necessity will appear to any one who will duly consider the subject, and contemplate its extent and range over and above that conducted in the schools.

The history of medicine, the best of all foundations, together with a strict attention to medical philosophy, would carry the mind forward to high advancements, and elevate it to the perfection of science—if that is ever to be attained or hoped for in the world. Dr. Barnwell thus sums up his argument for a change of medical studies:

“It has been asked, What do the common school divisions of medical study teach us? The study and practice of *anatomy* can only be useful in the manual operations of surgery: *Chimistry* can only prepare us to be the preparers of medicine, or qualify us to learn the Apothecary's art. But *hypotheses* and *speculations* have too generally been substituted in place of science, or theory founded on facts and experience; and the facts themselves have not been properly digested; so that their very volume, so vast and appalling, accumulating for four thousand years, excites despair in the student at the very sight, and defeats their own purpose, by consigning them, generally, to absolute neglect—like the laws of Draco, which, by their very severity, were rendered a dead letter.

Humanity triumphed over law, and refused to execute the dicta of a tyrant. All these reasons, together with the assurance that all the systems of medicine are defective, and that the whole of them, though submitted to expurgation, could not afford a complete system, announce the necessity of a thorough renovation in medical science. For, if the principles of the healing art can be reduced to scientific order, it is, undoubtedly, and object of sufficient importance to merit the attention of the student of nature, and the friends and admirers of truth.” And it is imagined that this new plan of conducting medical researches, will accomplish this invaluable object. And, upon this new plan, the theorist says:—When we leave out the antiquated theories and useless speculations, we shall find the indispensable and useful parts of the science and practice reduced to the moderate extent of *one course*, which, when completed, will amount to from ninety-six to one hundred lectures.

THE NEW PLAN OF STUDY, BY DR. BARNWELL.

I. *Historical*.—The progress and present state of the principles and practice of the healing art, in various parts of the world, and at different periods of time; The doctrine of the different sects, in medicine, the causes and consequences of their different tenets and enthusiasms; The best method of studying, of observing, improving and investigating medical science.

II. *Physianthropy*, or the physical nature of the human body, and the manner in which it is affected by external agents; The properties, principles and laws of human life; The varieties of constitutions and temperaments; The causes, phenomena, and *modus agendi* of morbid affections; The genera, species and variety of diseases.

III. The modern improved practice of the various departments of the healing art, by means of regimen—medicinal or surgical applications deduced from observation, experience and reason; The genera of the disease to be arranged according to their physical natures, deduced from their phenomena, symptoms and remedies; The species to be ascertained by the causes, nature and treatment, appropriated to them: The varieties are learned from appearances.

This is the new plan, proposed to be condensed in one course, and one hundred lectures. But, if all the objects here proposed could be attained in one course of one hundred lectures, the human mind itself must sustain a revolution. He who professes to be a reformer of the art of physic, says Dr. Harvey, must resolve to run the hazard of the martyrdom of his reputation, life and estate.

But, in this reform, we can only perceive distinc-

tions without differences, if we except the *historical introduction*, which is certainly of the highest utility in study, and should never be neglected. A science must be very imperfectly known, and unsatisfactory to an ingenuous mind, unless we are acquainted with its *rise* and *progress*, and trials, and variations. "*History* is philosophy teaching by example." And this philosophy, in medical science, is not only the best foundation, but the most *necessary* part of the whole study: For who are they that require examples, as a light to their path, if medical practitioners do not?

Physianthropy is a very good and comprehensive term, derived from *phusis* and *anthrops*—the nature of man, or philosophy of human nature. But, we apprehend, all this is contained under the divisions already reigning in the schools; Physiology, Pathology, Therapeutics and Anatomy. For I am convinced that no liberal mind would be disposed to confine the study of those subjects to the limited range supposed by the writer of the *New Theory*; but would extend them to the whole phenomena of the human economy.

To push investigations to their utmost boundaries, or, at least, as far as, or rather farther than common sense can follow them, is the predominant disposition of man. To stop short in his career of inquiry, does not belong to that aspiring spirit which fell from its supremacy, and its happiness, by desiring to become as God! And, although we are often misled by this reigning principle into vain and visionary speculations it is, notwithstanding, an irrefragable proof of the immortality of the soul; of its high origin and heavenly nature!

If nothing can rise above its own level nor act beyond its own limits, why is the soul of man constantly urging him forward beyond the limits of

sense and all material things; impelling him on the the abode of spirits, to contemplate the nature, the exercise and the felicity of assembled millions, which throng the heavenly temple and adore, before the throne, *day without night* rejoicing.

There is no doubt but medical studies may be greatly reduced and simplified, as they have been, in the examples and success of Drs. Brown, Rush, and Thomson. When Nosology is completely expelled from the science; when hypotheses and speculations are no more; when antiquated and useless theories are rejected, and a proper digest of *facts, experiments* and *observations* compiled for the use of the students, and principles properly derived therefrom, arranged in scientific order; the number of courses and of lectures may be greatly reduced, and the time of the student devoted more successfully to the *radical* and *important* parts of the science, which Dr. Barnwell comprehends under the *healthy, morbid* and *curative* nature of the vital actions and medical history.

From the whole matter, I presume it is a just inference, that, unless disease can be reduced to a *unit*, as Dr. Rush has done; that as hunger is removed by one remedy, food; so disease may be removed by one remedy, *diffusive stimuli*; the science of medicine, as digested under its present arrangements, can be very little improved. The highest human skill and ingenuity have been lavished on it for four thousand years. The acute and penetrating Greeks, the studious and profound Romans, the Europeans, with all the aid of their improved and advancing science, have devoted the labor of ages to correct, to *improve* and *perfect* the system of medicine.

But, if they should have all failed and come short of the high excellence which they most ardently

sought to obtain, it is no reason but the Deity, in love to man, may lead an untutored mind to make that discovery, which has been concealed from ages. "By their *fruits* ye shall know them;" is an infallible criterion in medicine, as in morals or theology. I cannot be deceived in the medicine which removes my disease.

The fruits of Thomson's practice have been so abundant, on the most forbidding soil, and so well authenticated, that we are called upon to admit its truth and respect its testimony; and it requires the aid of strong prejudice to resist its claims on public confidence and attention. Great men are not always wise; the most simple means are often overlooked, for the most labored and complicated; and it would be well to give the agency of God a place in the universe, as well as the agency of man. The *kine pock* is a mere accidental discovery, extremely simple, and yet powerful to expel disease, on which all the physicians of the world had spent their skill in vain, for twelve centuries; while it was carrying off annually one in every twelve of the population of the globe, and leaving its rude impress upon nearly one-half of the survivors. It will be easy for Divine Providence to discover a specific to men, for consumption, for fever, for plague, for every pain, as for the small pox; for a more loathsome and terrible disease could not be found amongst all the maladies of man.

There are herbs, says Dr. Ray, to cure all diseases, though not known every where. The Celtic tribes knew the most of them. They can take the *pain* out of a burn at once, and heal it soon, though burned to the bone; which baffles all the faculty in large and learned cities. The Celtic doctors are applied to by such as use the established practice, when given up by it,

The same writer says, it is a mistake that the animal spirit resides in the nerves, and not in the blood. It is self-evident, from the *opifex rerum*, or maker of man, that *life* is in the blood; for the heart and blood are first formed, and all the other parts, both solid and fluid, are nourished from it.—Death makes no alteration on the nerves, but it makes a total change in the blood. Though all the nerves are said to be derived from the brain and produced by it, yet the nerves are found to be in proportion to the size of the body, and not of the brain; and they are so in monsters where *no brain* can be discovered. The nerves and brain are themselves supplied, repaired and nourished by the blood. He, therefore, considers the **BLOOD**, and not the nerves, as the principal seat of disease, as it is the vehicle of heat and life to the whole system. The morbid action of the blood, the cause of disease, he says, is to be removed by barley water, pure water, pure air, light food, and gentle exercise.

LECTURE VII.

THEORY OF FEVER, ACCORDING TO MODERN SYSTEMS OF MEDICINE.

Dr. CULLEN.—*Fever, Pyrexia*, or *Febrile diseases*, designate their approach by a general debility and languor over the body; cold shivering, increase of heat, frequency of pulse, diminution of strength in the animal functions. These are the distinguishing characteristics, *Phænomena*; languor, debility, sluggishness in motion, face pale and shrunk. Stages, three; cold, hot and sweating.

The hot stage of fever is so constantly preceded by a cold stage, that we presume the latter is the cause of all that follows in the paroxysm of the disease. To discover the cause of the cold stage of fever, we may observe, that it is preceded by strong marks of general debility prevailing in the system. The weakness of the pulse, paleness of the face, shrinking of the whole body, plainly indicate that the action of the heart and arteries is extremely weakened. There is also a weakness of the energy of the brain.

Debility is the proximate cause of fever. The remote causes are, contagion, putrid effluvia from sick persons, decayed vegetable or animal substances, marsh miasmata, state of the atmosphere, cold, fear, grief, strong passions, or whatever exhausts the system and produces debility. There are, therefore, evidently, three *states* which take place in fever; state of debility, state of cold, state of heat; and these follow in a series of cause and effect.

The *principle* of action, by which the state of debility produces the cold state, has not been explained; but is referred to the *general law* of the animal economy or philosophy, which is, that when noxious powers threaten to hurt or destroy the *system*, it immediately assumes a repelling attitude to resist the hostile powers. This is called the *vis medicatrix naturæ*, in the schools of physic.

The increased action of the heart and arteries, which takes place in the hot stage, says Dr. Cullen, has long been considered as an effort of the *vis medicatrix naturæ* to repel the disease, by physicians; and the cold stage, also, an effort of the same power. In this sedative state, nature is concentrating her powers to that formidable resistance against the enemy, which she displays in the

strong paroxysm of fever; for it has been observed, that the paroxysm is always in proportion to the force of the chill.

This is precisely Thomson's principle, that fever is a friend, and not an enemy, but rises to subdue the enemy; and should, therefore, be aided in its efforts, instead of being broken and destroyed; which in fact, is to destroy life, to crush the very efforts of that *vis medicatrix naturæ*, which God, in mercy, has placed in the human form, to defend man from the innumerable evils which assail him in life. "Whether, therefore, we agree with ancient or modern theories; with the ancients, who supposed fever, this unusual motion in the blood, to arise from the *to arche*, to expel morbid matter from the system; or, the *impetus faciens*, the *anima medica* the *vis medicatrix naturæ*, or *vis insita* of their successors; all these moving powers, healing powers, spirit of life, principle of life, law of life, vital energy, amount precisely to the same thing; the vital action resisting the encroachments of disease. Life is opposed to death, necessarily and eternally. It is a necessity of nature. Light and darkness could as soon unite, as life and death. Whenever there is life, therefore, there will be a resistance to whatever has a tendency to produce death. It is an essential law of life; where it is not found, life does not exist.

The dispute of physicians respecting the proximate cause of fever, ought to be reduced to a single point, namely: In what part of the material system has the Deity lodged this vital principle or law of life, which causes the fevered action to repel disease? For, wherever life eminently resides, the action of resistance will first begin. One will answer, the blood vessels; another, the nerves; another, the sensorium; another, the medulla of the

brain and nerves and spinal marrow; another, the stomach; another, the absorbents; and, finally, some in all these taken together; and some, in the nerves, blood vessels, and the absorbents; Dr. Brown's excitability and Dr. Thomson's heat.

But where does the vital principle reside? In the blood! in the blood! we would certainly affirm, if it can at all be located or fixed to any part of the system. But if it is seated in the blood, its vital energies are diffused over the whole system. Now, that it is seated in the blood, we shall assign the following reasons. 1st, the experiments of Dr. Hunter on the blood. He found it to resist cold and corruption by its innate vitality. 2d, from the phenomena of the system. The blood is the recipient, and the vehicle of life and heat to the whole system; the nervous fluid, the sensorium, the medulla of the brain, and the nerves and spinal marrow are all formed and supplied by the blood; the absorbents are formed and supplied by the blood; the stomach is supplied and formed by the blood in the incipient stage of existence; for, in the fœtus, the heart and arteries are first formed; and from these, the vital current of the blood supplies and forms all the other parts of the system. Muscle, ligament, cartilage and bone, are formed out of the vitality of this all pervading fluid! Now, if the vital principle be located at all, common sense would undoubtedly place it in the blood; in that fluid and its organs, which give formation and vitality to the rest of the system.

It has been often remarked, that the Poets are truer to nature, than the Philosophers; yes, than the sceptical philosophers and their votaries. Scepticism generally springs from a cold, insensible heart, never warmed by a single ray from the eternal sources of the splendor of the Divine Majesty.

But the poets have warm and feeling hearts; they are truer to the voice of nature, and their figures and metaphors and sublime language, are predicated on nature, on revelation, and tradition, derived from original discoveries of the Divine will. We, therefore, find in them, animal life ascribed to the heart and blood, "The living current of the blood
The vital stream," Pouring his life's blood on the yellow sand," said Homer, of his hero; and Burns, in his "epistle to Davy, a brother poet," says:

"The *life blood* streaming through my heart,
Or my more dear, immortal part,
Is not more fondly dear."

2d, and finally, in confirmation of philosophers and poets and anatomists, the most acute, profound and penetrating; in confirmation of experiments and of facts, in the living process of the animated being, from the first germ to the finished system; we shall add the high authority of the living oracles: "For the life is the blood thereof."

In the law given to Israel, respecting the use of animal food, they were prohibited from the use of the blood, because it was the life of the animal. It has been said, in order to repel this application of the text, that it was on account of the sacred typical allusion it had to the Messiah's sacrifice, that the Hebrews were forbidden to eat blood. But this very exposition corroborates the argument that the life is in the blood; for it was a type of the Lamb of God, slain for the sins of the world. His life, laid down, was the atonement for the soul. And life and blood, in Scripture language, are convertible terms; the latter is, therefore, called the blood of atonement. From the first sprinkling of the blood of the Paschal Lamb, on that awful night

of Egypt's sorrow and despair, through all the sprinkling of the altar, the mercy seat, the cherubim, the books of the law, and the congregation of the Lord, until the son of God himself, sprinkled, with his own blood, the rocks of Calvary; the blood was a standing emblem of the price of the soul, and that price was life, the life given for its salvation. Man, by rebellion, had forfeited his life; life was given for this ransom; his life was in the blood; and hence the high and hallowed designations—The blood of atonement—The blood of Jesus Christ his son, cleanseth from all sin!—The blood of sprinkling, which speaketh better things than the blood of Abel!

The inference is now indubitable, that the animal life being in the blood, the resistance to disease and death will be in the blood. The fever, therefore, which is a battle in the blood to resist and repel the enemy, should be aided, by every principle of reason, argument, and humanity. If it be debility, remove the debility; if it be morbid excitement, remove the morbid excitement; if it be obstruction from cold, remove the obstruction. The fever which is the effect of all these, or the effort of the vital actions to subdue all these, amounts to the same thing, when we examine the principles. Let the cause be removed, and the effect will cease.

The house, at midnight, reposes in perfect peace. The robbers enter; in an instant all is turmoil and distraction. The clashing of swords, and guns, and pistols, and screams, and groans, are intermingled. This is an effect produced in the quiet mansions, by the robbers entering the house; it is also an effort, and a violent effort of the inhabitants to expel the intruders. Now, what would be thought of the wisdom of a passer-by, on hearing all this hubbub,

who should enter the house, and, utterly regardless of the robbers, would employ all his efforts to arrest the master's arm, and still the cries of his wife and children? He certainly would be regarded as insane; and his aid, although he did not intend it, was in help of the robbers, and against the family!

The case is clear, the fever begins in the blood; the vital principle is there; it rouses the blood vessels to extraordinary action. In the very preceding chill, it is mustering the clans, rousing all the forces to vitality, from the sensorium to the spasms of the toes and fingers, till every moving power, and the whole system, are finally engaged in the struggle. This has been called the spreading of the disease, by many physicians; but it is the united struggle of nature to resist death. And you may observe the melancholy events of the combat, as she yields to the destroyer; the extremities become cold and torpid; the eye glazed and dim; the pulse low—stops; the struggle gains upon the heart; the breast heaves with violent respiration; the last throb bursts on the appalled ear; the battle ends! Life is forever fled; and over the hollow and pale cheek of death, the king of terrors waves his triumphant banner! Alas! alas! that ever this king of terrors should be aided in his efforts to destroy the human race, under the idea of affording them relief! This is no suggestion of mine, to the prejudice of the Faculty; they themselves have accused each other with aiding the destroyer. Their books, their lectures and their quarrels, all testify to this solemn and serious truth of the fact of pernicious practice.

Dr. Rush accuses Cullen's nosology with directing physicians to prescribe for the names of diseases, instead of their proximate cause; he accuses them all, from the archæus of Van Helmont to the

putrification of Cullen. He himself was condemned, in turn, for letting out life with his lancet! In England, where people enjoy very robust health, they bleed little; sweating is generally practised to remove disease. It was here that Brown's system made the most rapid progress, because it fell in with the common sense of the people; of what they themselves had felt and practised. And all medical prescriptions should be at once submitted, in their composition, intention and operation, as far as these are known, to the common sense of the people. Of all professions, Medicine and Religion should be disrobed of the very shadow of disguise. Those systems which have for their objects the health and life of the body and soul, should be above all mystery and fincse; they should stand open and naked, and bare, before the judgment of the people, resting on their own evidence and merits and beneficent results. The lawyer may invent his writs and briefs, not to enlighten, but to darken and conceal his profession from vulgar eyes; but it is the course and glory of truth, to lie open to the day. There is a face of dishonesty and suspicion stamped on the very front of concealment, from which the ingenuous spirit turns away with loathing and disgust. And whenever the earth shall have been purged from her folly and her heathenism, the science and the doctrines and the deeds of darkness, from the mysteries of Eleusis to the abduction of Morgan, shall be swept from the page of the book of nature. Light, heavenly light, shall beam on all the professions principles and institutions of men; for there shall be nothing wrong; nothing that shall seek to hide deformity in darkness, nor to borrow consequence from the garb of concealment.

It is really piteous, in the advancement of sci-

ence and improvements of mind, to behold professors of medicine sticking to scholastic forms and disguises, in issuing their prescriptions. Why not adhere to the Hebrew or the Coptic or the Greek languages, in writing prescriptions, the languages in which medicine was first written, as well as still cleave to the Latin; it is a language as dead to the mass of the people and the boys of the Apothecaries, as any of the others. And to wrap up any part of knowledge in a dead or foreign language, to excite admiration and gain consequence, is worse than vain—it is pernicious. I know that a knowledge of language enlarges critical acumen and expands the power of thought; it opens the sources of ideas, and unfolds, as it were, the operations and springs of intellect. The study is, therefore, by no means to be despised nor neglected; but, as the great sum of the people cannot be linguists, why should those things which concern their life and happiness be concealed from them by a dead language?

It was but very lately that the lecturer on Theology, in Cambridge College, England, gave his instructions in English; and the reasons which he assigns for deviating from the accustomed mode of giving them in Latin, are, that the common people may be benefitted by their perusal, as well as the Clergy! for he wished all to be acquainted with a system which concerns their everlasting hope.—And why shou'd not a patient be benefitted by the perusal of the nature and operation of the medicine which he is about to swallow, which concerns his own life and the happiness of his friends and family?

In the treatment of fever, Dr. Rush endeavored to equalize the system by drawing the blood from the interior, to relieve the engorged vessels and ex-

cite action on the surface. This is to be done, according to the principles of Dr. Brown, by reducing or increasing excitement, according to the high or low state of the body. Dr. Chapman's object, in the cure of fever, is directed to the state of the stomach, as that, he says, is the great medium for acting on the whole body. Dr. Ewell says, "candor induces me to state the fact, that it is very doubtful whether the mode of treating fever be at all improved since the days of Hippocrates. Notwithstanding the great varieties of theory on the subject, the practice has been pretty much the same in all ages." "If inflammatory, evacuate; if low, stimulate;" this seems to be a reigning feature of medical science. Almost all the labors of the schools, and ingenuity and industry of professors, have been expended on the inventions and discussions of theories; thus, theory succeeded to theory; invention to invention; systems rose and flourished and fell; but the condition of the sick was permanent. The cures that ought to have relieved, but did not relieve them, remained the same for three thousand years; they were as fixed and permanent as the foundations of the everlasting hills. Although they discovered their medicines to be ineffectual, or pernicious, they were still neglected, for the delightful labor of building new theories.—The wrangle for distinction in hypothetical ingenuity, absorbed the efforts of humanity, in revising the *Materia Medica*, or relieving the sick. To find a safe and simple method of curing the patient, has been left to the direction of chance. "If there be, says Dr. Ewell, an improvement in the treatment of common fever, I think it is in the use of antimonial medicines." "Their operation is not understood, he says, but they tend to lessen diseased action in the blood vessels."

“What unaccountable perversity is in our frames, says Dr. Harvey, that we set ourselves so much against every thing new? Can any one behold, without scorn, such drones of physicians, that, after the space of so many hundred years experience and practice of their predecessors, not one single medicine has been detected that has the least force, directly, to prevent, to oppose and expel a continued fever? And should any one, by a more sedulous observation, make the least step towards the discovery of such remedies, their hatred and envy would swell against him like a legion of devils.”

Systems may be labored, *ad infinitum*, and practice diminished in the same proportion. The schools were never busier, than in the days of Thomas Aquinas; and perhaps practical piety was never at a lower ebb. To seek distinction by splendid writing, is one thing; and to become famous by practical utility, is quite another.

It was the defects of medical practice in his own family, which led Thomson to infer that their treatment of fever was wrong. Their theories he did not understand; but he saw the effects of their medicines; and affection, necessity and hope, led him to the discoveries, and forced him into that illustrious career which Providence seems to have smiled upon, with great and peculiar favor. And if the results of this new practice proceed as they have begun, there is no doubt but they will produce a complete revolution in the entire policy and practice of the medical world.

Dr. Rush divides fevers into two kinds; original and symptomatic. The latter arises from local affection; as wounds, bruises, inflammation of particular parts, as the lungs, bowels, kidneys &c.

Original fevers, he divides into three states: 1st, high inflammatory; 2d, intermediate; and, 3d, low

malignant states. He also enumerates thirty-five causes of fever; they all occasionally change their type, from the highest to the lowest grade. One fever will assume all the varieties, from the highest inflammatory to the lowest typhus; and it is sometimes doubtful how to fix upon the true symptoms, as they are often fallacious!

So extravagant are the sentiments of the physicians respecting fever, that Dr. Cullen, one of the most respectable, says, every time we feed or take nourishment, we have fever more or less! because we expectorate or raise mucus from the lungs.-- Food communicates heat to the system; and, therefore, because it, like all the aliment of life, will act with more force on the organs which may chance to be debilitated or diseased; it is, therefore, presumed it must be fever or disease!

The very superior mind of Rush becomes often entangled with the complex theories of former days. In enumerating the symptoms of disease, how strong is the power of habit! Notwithstanding the improved simplicity in theory and practice, so strongly recommended by Dr. Rush, one cannot but observe him, at times, plunging and floundering in the clouds and darkness of nosology! But, from the open, ingenuous and discriminating cast of his mind, it is very certain, had he lived, that he would have advanced and improved Thomson's System, by all the energies of an intrepid and disciplined intellect. The little time he had to converse with Thomson, or review his System, seems to have made a very favorable impression on his mind. He intended a complete examination; but death defeated his purpose, and robbed society of one of the brightest ornaments of charity and humanity that ever adorned this region of the globe. His fame, as a professor, was great; but that fame

which shall shine on the imperishable pages of the book of life—his efforts in the cause of humanity—shall shine when the heavens are no more.

Dr. Rush directed Samuel Thomson to Dr. Barton, as he was the Professor of Botany, and observed, that whatever Dr. Barton would agree to, he would give his consent. Dr. Barton advised Thomson to place his medicines in the hands of some celebrated doctors, and let them try the medicines, and give to the public such statements as they should deem correct. He left some with Dr. Barton for an experiment; but the sudden deaths of both these eminent men, (Drs. Rush and Barton,) defeated his purpose in his trial. But it is still to be hoped that some conspicuous leader in the medical ranks, may give Thomson's System a fair trial, and oblige the world with results. And humanity, science and common sense, are all united in one interest, to promote this object, to satisfy society and silence clamorous tongues.

The high moral character of New England has not saved her from the crime of persecution, from the history of the Salem witchcraft to the trials and persecutions of Samuel Thomson. A scene of persecutions and infamy, combined with his imprisonment and trial, and the perjury of witnesses, which would have disgraced the Inquisition of Spain. What, then, must be the stigma, the indelible brand, left on the face of a free and independent nation?

God has made the poor of this world rich in faith. And if he has made some of the poor rich in making discoveries which the wise have not made, shall the Courts of Justice, and the forms of law, be screwed up to the stern aspect and bloody purpose of tyrants and persecutors, to overwhelm them with darkness and sink them in oblivion?

There is a spirit abroad among the people, that will defeat all the efforts of petty tyranny, and the rancor of malicious slander! Who would not rather be Samuel Thomson, in his vile and loathsome dungeon, than Dr. French, flying from town to town, after his deeds of sin, with eternal infamy in his wings?

LECTURE VIII.

FEVER CONTINUED.

In tracing the progress of fever, in its diréful and disastrous course, we are compelled to regard a remedy, at once safe and powerful to still its raging, as one of the most signal benefits which the Deity has conferred on man. When we cast our eye over the map of human misery, and mark the monuments of the destroyer—the scenes of battle and devastation spread out over all the nations of the world, where he has marched with death and fever inscribed on his bloody banners, and behold the same defence to resist his power, and to baffle his malignity; we may exclaim with the poet—

“For *thou*, ten thousand thousand years,
Hast seen the gush of human tears,
Which shall no longer flow.”

The tears that have bedewed the earth, were we to calculate their sum, poured out for the dead, that have fallen by this one disease called fever, would form an ocean that might swim the living! Were the cold and ghastly forms of the victims that have sunk into the silence of everlasting sleep, by this one disease, since the history of the

son of the Shunamite, to the present time, collected into one monument, they would form a mountain that would astonish heaven and terrify the earth! What heart has not bled over a beloved friend? over children dearer than their own soul? over the wife or husband of their youth? And how many have seen all their earthly comforts wither under the sweeping siroc of this pervading and desolating storm? Yes! from the first thrill of the agitated nerve, the stinging pain, the hot and heaving breast, to "the pestilence that walketh in darkness, and the destruction that wasteth at noon day;" the human race, smitten in all its members, consumed in every limb, has sunk to the house of silence, in multitudes innumerable, under the single pressure of this destructive power.—Look at the East and West, the silent cities, the untrodden streets, the dismal, dark array of travellers on the path of death—and ask, Who hath done this? Echo, from her thousand caves, would ring out her response, *fever! fever! fever!* This is the disease which, to break, to baffle, to conquer or subdue, the learned Colleges of physicians have tried all their efforts, and spent their skill in vain. It must run its course, is the common sentiment; if one mode of treatment fails, we must try another, and another, till the exhausted imagination, the worn out sources of the materia medica, and the dying patient, arrest the hand of the experimenter, (and I might have said, tormentor,) or nature triumphs equally over medicine and disease.

"The practice of medicine is, perhaps, the only practice in which a man can profit by his blunders and mistakes. The very medicines which aggravate and protract the malady, bind a laurel on the professor's brow; when, at last, the sick is saved by the living powers of nature, struggling against

death and the physician. He receives all the credit of a miraculous cure; he is lauded to the skies, for delivering the sick from a detail of the most deadly symptoms of misery, into which he himself had plunged them; and out of which they never would have arisen, but by the recuberating efforts of that living power which at once triumphed over poison and disease and death."

The causes which have conspired to cover with uncertainty the treatment of fever, and to arm the members of the faculty often against each other, are numerous and important. A brief detail will unfold the many causes of error, and the fatal consequences which often result from the established practice.

1st. Fevers are said to be of two kinds; general and local. Local, from partial injuries or diseased parts; general, from an affection of the whole system, or morbid action of all the vital powers.

2d. There are three stages of fever; the cold, the hot and the sweating stages.

3d. There are three states of fever; the state of debility, the state of cold, and the state of heat.

4th. Causes of fevers are enumerated at thirty-nine and upwards.

5th. The forms of fever are, 1st, plague or pestilence; 2nd, malignant or yellow bilious fever; 3d, inflammatory bilious, or remittent fever; 4th, intermittent fever.

6th. The intermittent fevers, or agues, are divided into, 1st, the quotidian, or daily fever, having an intermission of twenty-four hours; 2d, the tertian, or third day fever, having an intermission of forty-eight hours; 3d, the quartan, or fourth day fever, having an intermission of seventy-two hours.

Now, when to all these we add the following

sources of mistake and uncertainty, it is not wonderful that more patients are killed than cured by the established modes of practice; and that the incomprehensible theories and pernicious consequences, have been felt, confessed and lamented, by every candid mind, from Hippocrates to Stahl. These we shall now enumerate.

1st. The symptoms of fever are mistaken; and one disease, or stage, or state, or class, is treated for another; and the physicians declare, the symptoms are often so blended, complex and Proteiformed and fashioned, that it is impossible to comprehend them. This is one source of uncertainty in practice.

2d. Nosology, or the mournful and dreary list of the names of thirteen hundred and eighty-seven diseases, besides the new diseases, so difficult to be understood, to be remembered, or distinguished, is another source of uncertainty in practice.

3d. Theories constructed on false principles, mislead the physician, and direct him to the use of wrong medicines; for false theories will make false practice. These are the causes of the uncertainty in practice.

4th. Error in judgment, from misapprehending the remote, the exciting, or the proximate cause of disease, destroys the certainty of practice, and brings death to the patient.

5th. Medicines used in the cure of fever, of the most dangerous nature, poisons of the rankest dye and most fatal tendency, are often the causes of sudden death, and destroy, or ought to destroy, all confidence in the established practice. It is, in truth, like running the guantlet amongst armed Indians or red hot plough-shares, to escape from the poisons of medical practice.

From all these causes, and many more that

might be assigned; such as the recipes being concealed in a dead language; the mistakes in filling them up; one substance mistaken for another; attendance of boys, and persons unskilled in the apothecaries' shops, where rankest poisons are distributed as medicines; all these causes have filled the whole history of medical practice with dismay, uncertainty and death.

“Mr. Barry, a respectable citizen of Boston, during the course of the last summer, applied to an apothecary for a dose of cream of tartar; in place of which he received tartar emetic; he had no sooner taken a small portion of it, than he was thrown into the most violent puking and spasms. A physician was immediately sent for, who administered fifteen grains of white vitriol. Death soon followed. *Query*—Which killed the man—the tartar emetic or the white vitriol?”

Now, the great superiority and certainty of Thomson's System, consist in the simplicity of his practice, and the safe and certain operation of his remedies. And, although Thomson seems to have been utterly unconscious of the hazards and difficulties of the established practice, yet, when these were brought to light, they served to confirm him in the value and universality of his discoveries: because, if all the wisdom of the schools, and genius and ingenuity of practitioners, had been baffled and confounded, through the lapse of four thousand years, it was evident that the discovery of a universal remedy for fever, must be found in another department than that of the established science! And, in that department, Thomson rose to eminence, and received “his degree from the hand of nature.” In that great laboratory of medical science, where nature makes our food and fashions our medicines, Thomson spent thirty years of his life. A quack

is one who, in unblushing ignorance, palms his detestable and deadly nostrums upon the public, of which he knows nothing! Thomson has laid before the public, without a shadow of concealment, remedies, the healing virtues of which he had tested by a practice of thirty years; and with an invariable and indisputable success which, had I not seen it, I should have deemed impossible. But some of the most learned of the faculty, who have attended to the effects of this new practice, have given their decided testimony to its power and its efficacy.

Prejudices, rank and strong, as might have been expected, have prevented the popularity of a "safe and simple method of cure" which bids fair, were it universally introduced, to banish disease and untimely death from the nations of the world; to introduce the dawn of that redeeming day when sickness shall not be seated in the constitution to emaciate the body and prostrate the mind, but shall be met and expelled at its very entrance, by a remedy that shall neither entail debility nor chronic maladies on the patient.

A ray of this new light seems to have broken in on the mind of Cullen; for Dr. Rush ascribes to him the first principle of his own theory, and that of Dr. Brown—that "Life is a forced state." This principle was detailed by Dr. Cullen, in his lectures, in the year 1766, "that man was not an automaton, or self-moving machine; but is kept alive and in motion, by the action of stimuli."

This seems to be the principle on which they all three acted, to restore the nervous energy, to remove the debility, to equalize the system; and Thomson, to raise the fountain and diminish the stream. The principle was simple and unique—but the medicine was very different. Dr. Rush

says, there is one disease; and morbid excitement in the blood, is its proximate cause. Dr. Thomson says, there is one disease, and one general remedy; and obstruction is the disease, and cold is the proximate cause.

1st. Now this seems to be the advantage in Thomson's practice. He directs his attention, not to eradicate the fever, but to remove the cause of obstruction, and restore the action of the digestive organs. The fever is regarded as a friend, and treated as a friend, by raising the internal heat to remove the obstruction which caused the fever—or disturbed action of heat.

2d. The medicine and mode of practice of Thomson, is far superior to that in use among the physicians; as has been demonstrated, by its effects in curing disease, when all their art had failed; not in one, or a few cases, but in many of the most protracted and complicated distempers, given over as incurable by the faculty.

3d. To enumerate its pre-eminence in restoring health to the system, we might, 1st, name its power in removing obstructions; 2d, in expelling virus from the blood; 3d, in throwing off morbid matter from the surface of the body so that the perspiration has deeply dyed and stained a clean towel with its taint; 4th, and in restoring and renovating all the vital actions and powers of the body, so as to give tone to the stomach and digestive organs; 5th, and finally, in removing pain, promoting calm sleep, in raising the animal spirits, spreading hilarity and cheerfulness over the mind, without leaving a taint in the constitution, or the sting of slow disease behind. It by far surpasses, in innumerable trials, all other medicines or modes of practice, which have been heretofore discovered or brought into operation; and promises fair to re-

duce the mysteries of the healing art to a very simple process, conducted in every family, and prepared and administered by the same hands which prepare and administer our food ! They grow in the same field, may be plucked by the same hand, and medicated by the same skill which furnished our daily bread. I have the authority of the celebrated Rush, to support this sentiment.

“ The essential principles of medicine are very few; they are moreover plain. All the morbid effects of heat and cold, of eating and drinking, and the exercises of the body and mind, may be taught with as much ease as the multiplication table. In support of this truth, let us look at the effects of the simplicity of the art of war, introduced into Europe; a few obvious principles have supplied the place of volumes on tactics. Private citizens have become great generals ; peasants, irresistible soldiers, in a few weeks, even superior to their predecessors, after the instructions and exercise of fifteen or twenty years.

Let us strip our profession of every thing that looks like mystery and imposition, and clothe medical knowledge in a dress so simple and intelligible, that it may become a part of academical education in all our seminaries of learning. “ Truth is simple upon all subjects; and upon those essential to the general happiness of mankind, it is obvious to the meanest capacities. There is no man so simple that cannot be taught to cultivate grain; and there is no woman who cannot be taught to make it into bread. And shall the means of preserving our health, by the culture and preparation of aliment, be so intelligible, and yet the means of restoring it when lost, so abstruse, that we must take years to study, to discover and apply them ? To suppose this, is to call in question the goodness

of the Deity; and to believe that he acts without system and unity in his works." "In thus recommending the general diffusion of medical knowledge," by an academical education, let it not be supposed that I wish to see the exercise of medicine abolished, as a regular profession. Surgical operations, and diseases which rarely occur, may require professional aid; but the knowledge necessary for those purposes, is soon acquired; and two or three persons, separated from other pursuits, would be sufficient to meet the demands of a city consisting of forty thousand people."

If this seems astonishing to any, let them remember the effects and discovery of vaccination, and cease to wonder if the Deity, by means the most inconsiderable, should accomplish what had baffled the skill and research of all the philosophers of the world.

Thomson was born for the fame he has acquired; and necessity, dire necessity, forced him into the niche of the Temple of Nature, where he now stands. His narrative is not to be forgotten, nor passed without the painful feeling of this additional evidence of the perversity of our nature and selfishness of our lives. If this were to be our everlasting home, we could not display a more determined disposition to establish our claims, right or wrong, and defeat those of our neighbors, be they ever so well founded.

Dr. Thomson reasons, If disease be an enemy to life, in every form, and medicine a friend in all, it must then be a universal remedy; for the sum is but the amount of the particulars; and the particulars, the items of the sum; as genuine food removes hunger of every degree, so genuine medicine, disease of every type. It is not necessary, therefore, to be changing the dose, any more than

it is necessary to be changing the food, to remove the malady in the one case, or hunger in the other.

Now, as the healing power of nature, in resisting disease, confessed by all physicians, seems to be effectually aided by Thomson's practice, he must have discovered the right practice, the true mode of curing disease. And that he has so discovered it, we thus judge: his practice suddenly expels the disease, has an effect the most salutary on the whole system, invigorates and renews the powers of nature, and leaves—"not a wreck behind."

Dr. Hillary, in his secret of curing diseases by adopting a better system of medicine, says "that, by accurately observing all the motions, endeavors and indications of nature, to carry off and cure diseases; and, by observing by what critical evacuations she does at last carry off the morbid matter which caused them, and so restores health; we may, by the same method of reasoning, know both the methods and the means we should use to assist nature in producing those salutary effects; if we avoid all hypothetical reasoning, and by thus observing, following and assisting nature, agreeably to her indications, our practice will always be more satisfactory and successful.

For the human body is so wisely and wonderfully formed, that, whenever any noxious matter is got into it that would be injurious or destructive, we may observe, it always so irritates, stimulates and offends nature, that she always exerts her power or the *vis vitæ*, to throw it off. And she acts with great regularity, order and uniformity, in her endeavors to expel the offending matter out of the body; and by carrying off the disease, restore health and preserve life.

And thus, by observing, investigating and truly

knowing, the diseases and their causes, and justly reasoning therefrom, we shall know when to assist nature according to her indications; and in this is contained the chief part of medical knowledge, and the true scientific principles of the medical art. And when we shall thus have learned of nature, by observing her laws and indications, we may reasonably hope to render the theory and practice of physic beneficial to mankind."

How just is this mode of reasoning, and how much does it resemble the process and workings of Dr. Thomson's mind in that straining effort, without the aid of book or friend, to penetrate the secret workings of nature; to observe how she moved in health and in disease; what were the reasons and results of her diseased action; how could she be aided or befriended; could a hand be lent her in the struggle, or must she triumph or sink alone! These, and ten thousand other questions such as these, must he have asked himself, while he looked mournfully on the approaching tremors of the final hour! I think I see him in the deep solitudes of the trackless desert, interrogating nature thus: "Is there no remedy, no healing balm, in all thy boundless stores, to save thy dying children? No powerful antidote to defend the human race from untimely death or protracted misery?" He was answered yes, for "there is a voice in stones, speech in trees, and sense in every thing." He received his answer, his science, his diploma, his medicine: Heaven sent him forth to work, fortified his mind, girt up his loins, and cleared his way! And it is but just to add, that the smile of approving heaven has most evidently blessed and accompanied his practice. A revolution in medical practice is nigh at hand. His plan is simple, as Nature herself is simple in her opera-

tions. There is no time spent in looking after names, symptoms, theories, causes and indications; the name is out, the cause out, the indication out, and the remedy out, and in a few hours, with the help of heaven, the patient is relieved, restored, requires food, recovers strength, sleeps, and rises, and returns to the business of life. These remarks may offend the prejudiced or stumble the incredulous; but facts, plain and evident, will support the mind in its adherence and its testimony, notwithstanding the opposition of the world. The thrill of joy, on beholding a single friend saved, will more than repay us for all the ridicule of this fleeting world. Lord Bacon declares that the only cause of death which is natural to man, is old age. And he complains of the imperfection of physic, in not being able to guard the principle of life, until the whole of the oil that feeds it be consumed.

Dr. Rush remarks, "I am here incessantly led to make an apology, for the instability of the theories and practice of physic: And those physicians generally become the most eminent, who have the soonest emancipated themselves from the tyranny of the schools of physic."

"Our want of success, continues the same writer, is occasioned by the following causes; 1st, our ignorance of the disease; 2d, our ignorance of a suitable remedy; 3d, want of efficacy in the remedy."—[See his works, page 79.]

"Dissections daily convince us of our ignorance of the seats of disease, and cause us to blush at our prescriptions." "What mischief have we done, under the belief of false facts and false theories? We have assisted in multiplying diseases; we have done more—we have increased their mortality."

"I will not pause to beg pardon of the faculty,

for acknowledging, in this public manner, the weakness of our profession. I am pursuing truth, and am indifferent whither I am led, if she only is my leader."

How noble was the sentiment! but it was congenial to the magnanimous soul of the great and venerable professor: And how well was he qualified, by sentiment as well as education, to appreciate the labors and discoveries of Dr. Thomson; to seize on his unity of disease as kindred to his own; another testimony to the practical application of his own doctrine, and the guidance of that truth which he so ardently admired. That two such men, the one the pupil of nature, and the other the disciple of the schools, should be both led, by reasonings from very different data, to the same conclusion, is both curious and important. It shows us that they were both close observers of nature; that they had penetrated far beyond the surface and appearances of things; that they had regarded the complicated maze of names and symptoms of disease, as the chief foundation of all the error and uncertainty in practice.

LECTURE IX.

ON MEDICAL POISONS.

It would seem a solecism in language, the bare combination of these terms; but such is the fact; poisons the most violent and destructive, have been denominated and accounted the most powerful and valuable medicines!

It is said to be a power of the living principle to assimilate all foreign substances to its own nature.

One might suppose that the physicians have strong reliance on this principle, when they make so liberal a use of poison for the cure of disease. The assimilation, however, often fails ; the hostility is too potent to be overcome, and life expires in the struggle; the process, notwithstanding, goes on ; and the poisons are still exhibited in the cure of disease, and are likely to continue, unless some men, conspicuous for their wealth and influence, shall unite for their proscription; for, so inveterate is the passion for the use of mercury in medical practice, that it has passed into a proverb—"deprive a physician of his mercury and his lancet, and he is like a lion without claws."

It has been remarked, by many acute writers, that, as the science of medicine became technical, theoretic and complex, simple remedies were rejected, and combined and complicated medicines supplied their place; and these were so compounded and disguised, to render the practice mysterious, that the patient could never tell which article of the compound relieved him, or what it was that relieved him at all. If the medicine failed in its effects, or was injurious, the whole was ascribed to the disease, not to the remedy. A bad habit of body, virulent state of the blood, obstinate case, Protei symptomatic developments, unknown type, unusual symptoms, have all been assigned as the cause of failure, instead of ascribing it to the poison which was exasperating the system and arousing every power of life against the outrage.

"There is," says Dr. Thomson—for even he is sometimes sublime—"there is a power beyond the reach of art, and there are gifts which study and learning can never rival." He seems to have possessed those gifts and that power, and to have employed them with great and uncommon success.

His mode of theorising leads to this conclusion: He perceived that, in food and drink, nothing was good but what was congenial to nature and in harmony with the laws of life and health. From these principles, so obvious and well established, he drew the inference, that medicine, designed to restore health and remove disease, must be in harmony with the laws of health and animal life, and opposed to disease—hostile to every thing noxious to the living powers of nature. In this mode of reasoning, he was confirmed by a painful experience of medical practice in his own family. He found the physicians had not success, and he discovered their medicines to be poisonous and the reverse of nature; an aggression of her power and violation of her laws. He had carefully observed nature's mode of curing disease—or the practice of the *vis medicatrix nature*, as the schoolmen would say—and he conceived the whole secret of curing diseases consisted in aiding the efforts and operations of nature, by administering medicine which was in conformity with her laws.

For so curiously and wonderfully are we made, that whenever we are assailed by any noxious power, the system immediately assumes a new and generally a violent form of action, to resist and to overcome it. Her operations in supplying flesh, ligament and bone, when these have been injured or removed from the body, have been the admiration and astonishment of the students and lovers of nature in every period of the world.

The skill and power of nature to prevent deformity or injury, in filling up and supplying the defects of any part of the system, is, indeed, so marvellous that, both in ancient and modern days, it has been ascribed to the agency of a precipient, a conscious and intelligent power.

Thomson pursued his system which was to observe nature in her efforts to cure disease ; to aid her, by remedies in harmony with her laws ; to support her when ready to perish, and to allay her fury, when roused to excessive action. For the latter, his nervine is incomparable, and for the former, Nos. 2, 3, and 6, or 4, 5 and 6, will be found a safe and salutary remedy.

The mineral poisons, used as remedies so excessively and universally, seem still to advance, until they have become as common at the bed side of the patient, as food on the table of the healthy. This state of things has long progressed with accumulating power and the most disastrous and ruinous consequences. The time, however, is nigh at hand, when poisonous remedies shall be hunted from medical practice. Great and wise and noble men, in every quarter of the globe, are opening their eyes to this wide-spreading havoc and devastation, and raising their voices like a trumpet to withstand and overwhelm it.

The Medical Colleges of Paris and London and Edinburgh, are taking the lead in the great work of regenerating the medical world ; in arresting the practice of poisoning the human system, and sending millions unwept, unpitied, unannealed, to people the realms of the King of Terrors. Our own country has raised her warning voice ; the great and good Dr. Rush opened the cry, and it now resounds from the University of Massachusetts to the wilds of the West. "I am sick," says the celebrated Dr. Waterhouse, Professor of *Materia Medica* in the University of Cambridge ; "I am sick of learned quackery !" And he adds, "The Flora of North America is astonishingly rich in remedies. There is no doubt, in my mind, that in more diseases than is generally acknowledged, ve-

getable simples are the preferable remedies. Who knows but in time, these native productions of the field and forest, will so enlarge and confirm their dominion as to supersede the employment of other medicines." The dawn has broke upon us, and bright day shall go forth and shine; when we may hope to live with the dear objects of our love until ripe and full of years, we shall be gathered to our fathers.

Dr. James Hamilton, Fellow of the Royal College of Physicians and Professor of Midwifery in the University of Edinburgh, says: "Among the numerous poisons which have been used for the cure or alleviation of diseases, there are few which possess more active, and of course more dangerous powers than mercury. Practitioners prescribe, on every trifling occasion, calomel or the blue pill: thus, calomel is now almost the universal opening medicine, recommended for infants and children; and a course of the blue pill is advised, without any discrimination, for the cure of trifling irregularities of digestion in grown persons."

Dr. Falconer, of Bath, in a paper inserted in the Transactions of the Medical Society of London, May, 1809, has reprobated the dangerous practice of giving mercury on every trifling occasion, and his warning voice has been re-echoed from the Medical College of Paris.

"Preparations of mercury, exhibited for any length of time," says Dr. Falconer, "whether internally or externally, increase the general action of the heart and arteries, produce salivation, followed by emaciation and debility, with an extremely irritable state of the whole system."

"The effects of mercury are expressly mentioned or virtually admitted by every author, ancient and modern, who has directed its use and it must

appear extraordinary that their full influence should have been misunderstood, or at least not sufficiently regarded."

"Blood drawn from the arm of the most delicate and debilitated individual, subjected to a course of mercurial medicines, exhibits the same buffy crust with blood drawn from a person laboring under pleurisy. The secretions of the skin are greatly increased." "Reasoning upon this subject, it may be concluded that inordinate action of the heart and arterics, attended with an altered state of the blood and with debility, while the increased secretions attending this violent action have no tendency to allay it, health must be rapidly undermined. If there be ulcerations in any part of the body, they must degenerate into malignant sores, as blistered surfaces mortify, in cases where the living powers are much exhausted!" Dr. Reece's observations on the mercurial disease, have confirmed and established these remarks. Dentists have traced the progress of mercury, in medical practice, by the progressive accumulation of decayed teeth and other diseases of the gums. But these are the smallest evils resulting from this practice; the morbid effects of mercurial medicine are almost innumerable; retchings in the morning, disturbed sleep, frightful dreams, impaired vision, aches and pains in different parts of the body, sudden failure of strength, as if just dying, violent palpitations at the heart, difficult breathing, with shocking depression of spirits, intolerable feelings, nervous agitations, tremors, paralysis, incurable mania, mental derangement, fatuity, suicide, deformity, bones of the face destroyed, and miserable death."

"These maladies," continues the doctor, "have embittered life in such a degree, and rendered existence so intolerable, that it is more than probable

many of the suicides which disgrace our country have resulted from this state of the nervous system, produced by mercurial practice."

In the medical schools of Paris, Bichat has established a new theory of medicine, from his discoveries in anatomy. Broussias, practising upon this new system, gives the patient almost no medicine and very little food. His object is to starve the disease; when, he says, it will burn out of itself.

Therefore, to cleanse and open and purify the stomach and bowels, he makes the patient drink freely of mucilaginous drinks, with very little or no food, and if any, of the very lightest kind, and wine to prevent debility. All his practice is said to be accompanied with remarkable success.

These beginnings of opposition to this fatal remedy or deleterious poison, although not accompanied with all the success which we might expect, must yet infallibly gain influence, and finally overwhelm the practice with abhorrence and detestation.

The poisons used for medicine are, mercury, in various states of preparation, arsenic, or ratsbane, corrosive sublimate, white vitriol, antimony; a metal so powerful and deleterious, that a quantity so minute that it cannot be sensible in the finest balance, is capable of producing the most violent effects; nitre, tartar emetic, iron, opium, foxglove; which causes vomiting, syncope, coma and convulsions; hemlock, the substance used of old, to put malefactors to death; deadly night shade &c.—This is the terrible array mustered by the masters of the healing art, against the life and peace of the distressed and wretched. The apology of Paul can only avail them: "I did it through ignorance," said that sublime Apostle, when recording the time

in which he had persecuted Christ. And the time will arrive when future generations shall look back on the theories and practice of medicine which now prevail, with as much astonishment and abhorrence as did Paul upon his former life. "They did it through ignorance," will be the kind apology which children yet unborn will make for their predecessors, while they shall heave a sigh for the miserable victims which had been sacrificed on the altars of mineral poison and the reigning Moloch of Mercury. The deplorable effects of administering these poisonous medicines, can never be foreseen nor defeated with certainty, because their operations depend upon causes beyond the reach of the physician's skill. The morbid effects of mercury, when given in very small quantities, have been sudden and fatal! it has lain latent for years, before the effects appeared, and then displayed the most dangerous results.

There are certain constitutions, says Dr. Falconer, in which the most dangerous consequences appear from the exhibition of mercury; and yet they have no marks by which we can distinguish this peculiar tendency; and there is no method of arresting the dangerous progress of the medicine, when once in active operation.

The administration of mercury, to be safe depends on the peculiar state of the stomach, the habit and temperament of the body; for what will produce death in one patient, will scarcely seem to have any sensible effect upon another. One will take thirty grains and not be salivated; another will be salivated by five. One it will violently purge, and another vomit; another, ulcerate the mouth and destroy the bones of the face. All metallic preparations are uncertain, because it depends entirely on the state of the stomach whether they

have any action at all, or act with violence and terrible consequences; nor can this state of the stomach be previously known. The danger of administering them is,

1st. They are hostile to life and in direct opposition to all its laws and principles.

2d. The state of the stomach and habit of body, on which their action depends, cannot be known, in relation to the medicine; death or life, or chronic misery, may be the result.

3d. If given at all, the proper quantity cannot be ascertained.

4th. The exhibition of the dose, by ignorant or careless hands, renders the danger still greater, and the condition of the patient more insecure and sometimes fatal.

5th. Their exhibition multiplies disease, aggravates misery, entails the long line of chronic complaints on millions, poisons the system, embitters life, and accelerates death.

And what else can we expect? Can we believe that man is such an anomaly that life and death can spring from the same cause? That the poison which destroys health, can restore it? This looks very much like putting darkness for light, and light for darkness; calling bitter sweet, and sweet bitter. If poison be both our bane and antidote, we are strangely made! If the mineral poisons do appear to remove disease, in some cases, how can it be known that they do not leave a taint in the system, a virus in the blood, and entail a wretchedness which hangs upon the miserable victim forever; drinking all the springs of life, until he sinks a martyr to his remedy, into the cold embraces of the tomb! Now that they do so engender disease, Mr. Mathias has incontestably shown, and the experience of others has confirmed it,

"That certain dangerous changes upon ulcerations originally syphilitic, and certain derangements of health occur, wherever mercury has been administered in too acrid a form, or in too large a quantity." Dr. Falconer once saw mercury applied for redness in the face, which it speedily removed; but also produced death, by causing dropsy in the breast.

"A boy about eleven years old, had a sore on one cheek, occasioned by a dentist extracting a tooth; a physician was consulted, who immediately prescribed a course of mercury. In a short time ulcerations in the throat appeared, the nose sunk, and one eye was nearly destroyed; while the general health was so injured, that death followed in a few months.

"A lady, whom the same writer attended, had such small doses of the blue pill, combined with opium, for three nights in succession, that the whole quantity amounted to no more than five grains of the mass. Salivation began on the fifth day, and, notwithstanding every attention, the tongue and gums became swelled to an enormous degree, bleeding ulcers of the mouth and fauces took place, and such excessive irritability and debility followed, that, for nearly a whole month, her life was in the utmost jeopardy. Every practitioner must have met with similar cases."

Dr. Ally saw a boy about seven years old, covered with a violent eruption, in consequence of taking three grains of mercury as a purge, which did not operate as intended, but threw its virus on the skin.

Another instance will serve to show how mercury may lie inert in the body for years, and then become active, from some incomprehensible cause.

"A lady, the mother of four children, in the

twenty-eighth year of her age, had a bad miscarriage at the end of the fourth month. When the author was called, she was very much reduced by the loss of blood, and required the ordinary palliative remedies. Three days after the first visit she complained of a bad taste in her mouth, with soreness in her gums; and, on the following day, salivation took place. On inquiring into the circumstances of her previous history, it was learned that four years before, she had, for a fortnight, a course of the blue pill, which had only slightly touched her gums; and it was solemnly asserted, that she had never again taken any preparation of the mercury, and had been in general good health."

"The salivation was, therefore, at first, attributed to some accidental cause; but when it was found to be proceeding with great violence, the medicines which the lady had been taking for the abortion were carefully analyzed, but they contained no mercury. The most anxious care and unremitting attention proved unavailing, as did all the remedies used in similar cases. The salivation, with the usual consequences of excessive emaciation, debility and irritability, continued for above twelve months; occasionally, for a day or two, it was checked; but alarming symptoms, vomiting, with threatened sinking of the living powers supervened."

These are but very few of the distresses and calamities caused by the use of mineral poisons in the cure of disease. It has been conjectured, that if we were able to trace their operations on the system, it would be found that perhaps all chronic and hereditary diseases were derived from poisons taken into the body in the form of remedies; that for a while, they might lie concealed, yet they were working in secret and preparing for that dis-

play of morbid action which fills life with misery and leads to an untimely grave!

"Can a man take fire into his bosom, and not be burned?" said the wise man. And we may say, can a man take poison into his stomach, and not be poisoned? He may not immediately die, but may not a disease be generated in the system that will render the remainder of his days deplorable and wretched? when firm health and refreshing sleep, shall be strangers to his history? "We know not, says Dr. Reece, whether we should hail the discovery of mercury as a blessing or regard it as a curse, since the diseases it entails are as numerous as those which it cures." "There are serious objections also to other articles of the metallic world; antimony, iron and arsenic, are dangerous remedies in the hands of the ignorant; and mankind, perhaps, in the aggregate, would be benefited, by their expulsion from medical practice."

Dr. Reece is a member of the Royal College of Surgeons, London, and he thus remarks on the charter of that institution. "The charter of the Royal College of Physicians is found to contain this singular licence; which is, 'a permission to any one and every one to practice the healing art by *herbs only*.' Now we do consider this is as ample a commission as any man would require; for poor must be the resources of that physician's mind, and narrow his knowledge of medical botany, who could not, from the vegetable kingdom alone, cure most of the disease of the human frame. Even the specific of mercury, were we driven to the necessity of a substitute, might probably be rivalled in some of the productions of nature."

These confessions and remarks, from a man high in his profession and eminent in the literary world, speak volumes on this important subject. It is

certainly time to draw upon these resources of the vegetable kingdom, and abandon forever the mineral poisons. The argument is copious and clear and strong, from Dr. Reece's own statement, to expel them forever. Why should the use of dangerous medicines then be still adhered to, while it is confessed the medicine of the vegetable kingdom are so abundant, so safe and so superior? There must be a strong perversity in our nature, as Dr. Harvey says, to resist the force of facts and evidence so abundant and accumulating and irresistible.

In 1816 and '17, the spotted fever raged at Eastham, Cape Cod; of those who used the system of Dr. Thomson, thirty-three out of thirty-four lived; and eleven out of twelve died, of those who used the old practice. Dr. Cyrus Thomson, a son of Dr. Samuel Thomson, in a practice of four years and six months, during which time he attended 1250 patients, lost out of that number only six; and most of those cases were of the most dangerous type, or of such as had been surrendered to death by the regular physicians.

To the list of dangerous remedies, Dr. Reece might have added the lancet, the blister and many others. An eminent physician has said, "that after the practice of blood-letting was introduced by Sydenham, during the course of one hundred years, more died by the lancet alone, than all who, in the same period, perished by war!"

We all know how long and painful was the struggle, before liberty of conscience and civil liberty could be established in the world, or before even the liberty of thought was permitted in the schools. And even to this day, they have only partially obtained in the world. "Like angels' visits, few and far between," have been the periods of their triumphs and the bounds of their establishment. The

tyranny of medicine is running the same career and usurping the same authority over the rights and privileges and understandings of men; or why so much mystery and disguise in the composition of pills and medicines and forms of practice? Why has the strong arm of the law been called in to aid the faculty, as if they were a privileged order, before whom the discoveries, the experience, the common sense, and the understanding of the people must bow, as to a Dagon?

I know a case, that will be certified by a gentleman of this city. He was attacked with rheumatism so severely as to be confined to his bed and helpless for five or six months. The physician gave him no relief, but rather aggravated his complaint. A poor woman from the country said she could cure it by certain herb tea. In twenty-four hours after the use of the tea, he was able to walk his room; the doctor called; was astonished at the change, and was informed what produced it; psha! said he, I knew that remedy long ago. And why, said the patient, in a rage which almost induced him to take the doctor's life on the spot, why did you not then relieve me from such excruciating sufferings? Because said the doctor, very coolly, the remedy *was not set down in our books!* The authority of books has often set at defiance the authority of God and trampled down the peace and sense and independence of man,

LECTURE X.

HEPATITIS AND PHTHISIS PULMONALIS, OR DISEASES OF THE LIVER AND LUNGS.

1st, *Inflammation in general.*—When any part of the body, says Dr. Cullen, is affected with an

unusual degree of redness, heat, pain and tremor, we name the disease an inflammation or phlegmasia.

2d, As the external, so also the internal parts, may be affected with inflammation; and we judge them to be so, from pyrexia, fixed pain, attended with interruption of the exercise of any of their functions.

3d, We also judge of the presence of inflammation, by blood drawn from the arm; when the blood, after cooling, shows a portion of the gluten, separated from the rest of the mass, and lying on the surface of the crassamentum, and, as such, separation happens in all cases of more evident phlegmasia, so in ambiguous cases, we, from this appearance, joined to other symptoms, conclude the presence of inflammation.

I. In the phenomena of inflammation, all agree that there is an increased impetus of the blood in the vessels of the part affected; and as, at the same time, the action of the heart is not considerably increased, we infer that the increased impetus of the blood in the particular part, is owing to the increased action of the vessels of the part itself. The cause of this increased action of the vessels, we are to enquire after, and consider as the probable cause of inflammation. The application of a stimulant will, in many cases, enable us to ascertain the part affected by the inflammation, as a stimulant will increase a pain in the side, in the breast, in the head or in the stomach. When this occurs as a proximate cause, the stimulants are disused and sedatives prescribed as the mode of cure. But when the application of stimulants do not indicate the part affected, physicians suppose an obstruction in the extreme vessels, by some cause unknown, perhaps cold, to be the proximate cause of inflammation. But many difficulties attend this doctrine;

an error in the proximate cause will infallibly lead to error in the mode of treatment. Dr. Cullen supposes that some causes of inequality in the distribution of the blood, may throw an unusual quantity of it upon particular vessels, to which it must necessarily prove a stimulus. But further, it is probable that, to relieve the congestion, the *vis medicatrix naturæ* increases still more the action of these vessels, which it effects by the formation of a spasm on their extremities, as in all other febrile diseases. A spasm, therefore, of the extreme arteries, supporting an increased action in the course of them, may be considered as the proximate cause of inflammation in all cases not arising from the direct stimuli.

II. The inflammation of the liver seems to be of two kinds, the one acute and the other chronic. The acute is attended with pungent pain, considerable pyrexia, a frequent, strong and hard pulse and high colored urine. The chronic hepatitis very often exhibits none of those symptoms, and is only discovered by the formation of large abscesses in the liver. The acute hepatitis is known by a pain in the right hypochondrium, dry cough, pain in the clavicle and top of the shoulder, and in lying on the diseased side.

The disease may be seated either on the concave or convex side of the liver; in the latter case, the pain is more pungent and the respiration is more considerably affected. The inflammation is often communicated to the gall-bladder and biliary ducts, and this is perhaps the only case of idiopathic hepatitis attended with jaundice.

The general plan of cure is by the application of blisters, fomentations, bleeding, purges, salivation, mercury in various exhibitions, or the blue pill in small doses with nitre, salts, magnesia and

other medicines. Now it is well known, from long and mournful experience and fatal examples, that this mode of practice, if it does relieve the liver, removes obstructions or abate inflammation, will, at the same time, reduce and exhaust all the energies of the living powers. According to Dr. Cullen's own theory which, if it be not the theory of all others, the mode of practice is the same, how can the *vis medicatrix naturæ* support its energy, attacked at once by the loss of blood, by the poison of mercury and the direful effects of blisters and salivation? How many are cured by this mode of practice? How many die? How many do we not know in this city, progressing from year to year in their painful and rapid journey to the grave, without receiving any relief? Some are relieved, but it is partial relief; the complaint returns, and re-returns, until the system is consumed and wasted, all the vital powers exhausted, and then the patient is declared incurable! not that the disease is incurable, but the medicine and mode of treatment have made it so, by destroying the powers of life!

Dr. J. Smith confessed of a lady in this city, laboring under hepatitis, that she was reduced so low he could not prescribe for her, without aggravating some one of her combined diseases, and that she could not endure any more medicine, so dangerous were the symptoms. Mrs. Sullivan, whom, I presume, you mostly all know, is the lady I speak of. She had suffered under the disease and the effects of medical practice, for eleven years, or upwards; and, from a simple bilious cholic, it spread to the extent of nosology itself, by the help of medicine. Bleeding, tartar emetic and mercury were administered by physicians in the state of New York and here until Dr. Smith said he could give no more

medicine—she could not bear it. To die was now her only hope. Thomson's medicine was recommended, and immediate relief obtained; the complication of disease yielded altogether, and, if firm health and vigor were not obtained, the vital powers were restored, so as to make life comfortable, food nourishing, sleep refreshing, and strength to attend to the duties of her family; and now, to undertake a journey of fourteen hundred miles, to see her friends! Whoever had seen the sufferings and sinking of strength and spasms of this lady, previously to the use of this new remedy, and should see her now, would think her recovery little less than a resurrection from the dead!

The very severity of the mode of practice for hepatitis, as it has been heretofore pursued, has so debilitated the system that, perhaps, more have been killed than cured, and more said to have been cured than ever enjoyed any kind of tolerable health through the remainder of their days; every change of air or exercise, causing pain, depression, irritation, fainting, languor, and all the symptoms of dejection and debility, which result from an exhausted state of the vital powers! For it is axiomatic in the economy of life, that, whenever the system has been so far reduced by severe medicines or otherwise, as to lose in a great measure its power of reaction, good health can never be enjoyed. Every irregularity affects the whole body, while it has not power to repel or reduce the morbid action.

Dr. Thomson's system has never yet failed, where it has been fairly tried, in removing this disease; without leaving any, of all the nameless train of miseries, which tartar emetic, mercury, purging and bleeding and antimonial powders, entail on the system. But, on the contrary, this botanic medicine purifies the blood, restores the tonic pow-

er of the fibres and the stomach and digestive organs, re-animates the whole frame, rouses the animal spirits, and acts, as it has been said to act, in harmony with life, in support of health, and in opposition to disease. A medicine thus acting, is not to be overlooked nor rejected for the feeble prejudices of man.

There is one cause of the frequency of inflammation of the liver, which ought not to escape observation. The circulation of the blood is remarkably slow through this organ, being computed at only one twenty-fifth part of the rapidity of other veins of the same diameters; the vena portæ, which distributes the blood through the liver without the aid of arterial action, is the cause of this slow circulation. There is a small artery which goes to the liver for the purpose of supplying its nutrition, but it affords no aid to the secretion of bile, nor to the circulation through the glandular parts. Now, this is one of the singular parts of the animal economy, nutritious and secretions of the various organs are always supplied from the arterial blood, this of the bile alone excepted; it is *sui generis*. The vena portæ collects the blood from the stomach, intestines and lower belly, and from thence conducts it to the liver, through every part of which it is distributed, for the secretion of bile from it, by its glandular parts; and this blood is again returned to the heart by a branch of the great vein. Now, to force the blood forward through the circulation in other parts, there is requisite a considerable degree of arterial force; but here there is none; as it is all expended, perhaps, more completely than in any other part of the body, by the length and minuteness of the ramifications of the blood vessels in the lower belly, which are not equaled in any other part of the whole system; hence, the slow-

ness of the circulation of the blood in the liver, and the danger of engorging the vessels by the increase of arterial action. The melancholy, the languor, the despondency, the dull and heavy eye, which accompany this complaint, always indicate its peculiar force. A rapid flow of blood is always necessary to strong health and high spirits. In the liver, at best, the motion of the blood is so slow that it is only the twenty-fifth part of the common time, in order to give it time for the secretions of bile; but if any thing impede this motion, deep grief, moping melancholy or imaginary trouble broods upon the mind.

The Empress Josephine attributed the melancholy dulness of Lucien Bonaparte, and his dislike to activity, to the deficiency of his digestive powers. She had learned this from the physicians; for none can surpass the faculty of Paris. There can be no proper digestion without a sufficiency of bile. Now the circulation in the liver becoming languid from grief or depressing passions, or any other cause, and the vena portæ not being aided by the impelling power of arterial force, to perform its laborious functions, and its energy depressed by the passions themselves; the blood accumulating in the branches of the porta, causes a painful and obtuse sense of oppression, anxiety and despair; and very often complete mental derangement. And although it be not often suspected, the fact is certain, that the liver is far more frequently the seat of mania and melancholy, than the brain.

How invaluable then must be that cure which can safely remove a disease pregnant with so much misery and replete with such innumerable disasters and terrifying results to the human race. Terrible must be that influence which can chain down the freeborn mind to systems incompetent and dele-

terious, and render it regardless of a discovery, as potent to expel the complaint, as kine-pock to consume that virus of the blood, which had been devouring the one-twelfth of the human race for 1,200 years.

Dr. Barnwell, in describing the treatment for disease in the liver, says: "It may be thought by some of our readers, that we are not acquainted with the use of mercurials in diseases of this organ; but it has happened that we are but too well acquainted with their effects in acute hepatitis. Mercurials, for about twenty years past, have been in their meridian fame in India; but we hope, from our acquaintance with their pernicious effects, that some of the physicians have minds formed so as to profit by experience." "The abuses of mercury in cases of acute hepatitis, or in any stage of it, when attended with acute pain, we know to be the most pernicious mode of treatment which it is possible to invent. The efficacy of mercury was discovered in India about fifty years ago, in chronic diseases of the liver, and being indiscriminately recommended, it soon got into general use; and when the patient died by the application, as they generally did by this treatment, the acute were set down as incurable. But the mischief did not end here; for its application was transferred to other inflammations, until mercury was at length considered a specific, in all the stages and varieties of disease.

"But we can safely pronounce mercury to be highly pernicious in the first stages of disease, whilst the pain or true inflammation is present. For tubercles or imposthumes are so apt to follow, that it is scarcely possible to avoid them; a circumstance to be dreaded above all others. These are the effects which we have seen invariably take place, from the abuse of mercury, in the early stages

of disease; so that we are not more certainly convinced of the poisonous effects of arsenic, than we are of those of mercurials, given in the acute stages of this disease.

“It may be thought our criticisms on the abuse of mercury are too severe; but let it be remembered that, when applied to those who, either through ignorance or irrational proceedings, sport with the lives and health of mankind, there should be something still more than severe words, applied to such offences.”

Dr. Barnwell had practised medicine both in India and America, and declares the destructive effects of mercury he has often witnessed on both sides of the Atlantic. And who has not witnessed such horrible consequences; the destruction of the face, the emaciated and miserable form; the living death, moving in place of a human being! Who has not witnessed all these, and many more, who has at all attended to the diseases and the management of the human family?

III. *Phthisis pulmonalis* or consumption of the lungs, is defined to be an expectoration of pus or purulent matter from the lungs, attended with a hectic fever. In every instance of *phthisis pulmonalis*, there is, as we suppose, an ulceration of the lungs. Dr. Haven has supposed that pus may be formed in the blood vessels, and be from thence passed into the bronchiæ. A catarrh is attended with an expectoration of matter so much resembling pus, that physicians have been often uncertain whether it was mucus or pus. It is of consequence to determine this point, and it may be done with sufficient certainty for the purposes of practice.

1st. From the appearances of the matter, mucus is naturally transparent, and pus always opaque;

when mucus becomes opaque, it is white, yellow, or greenish; which latter color, is not so considerable as in pus.

2d. From the consistence; mucus is more viscid and adherent; pus less so.

3d. From the specific gravity compared with water; it is usual for the mucus of the lungs to swim on water, and pus to sink.

4th. Expectorations of pus are connected with a hectic fever; but expectorations of mucus, though with fever, yet not with hectic fever. There are many of these distinctions recorded by physicians, but these are sufficient to satisfy a person's own mind. For disease is aggravated, if the mind despairs or becomes gloomy.

This disease is remarkably different, in many of its phenomena, from those of the liver; for though great debility and emaciation take place, the mind, for the most part, is confident and full of hope: the senses and judgement commonly remain entire to the very end. In some cases delirium takes place a little before death; but this happens seldom.

The phthisis pulmonalis, says Dr. Cullen, "is exceedingly difficult of cure." It may be doubted whether this failure is to be imputed to the imperfection of our art, or to the absolutely incurable nature of the disease. I am extremely averse, in any case, to admit of the latter supposition; and can always admit readily of the former." Dr. Rush always firmly maintained the same opinion, that no disease was in itself incurable; the failure constantly arose from mismanagement or imperfection in the practice.

The remedies prescribed are, blood-letting, low diet, a total abstinence from animal food, milk and vegetable diet. The ass's milk, in this complaint, has long been found the best remedy. Dr. Buchan

says, he knew a man who was cured by sucking his wife who happened to loose her child; he sucked her breast to give her relief, and, finding the benefit great, he continued until perfectly cured! He became a sound healthy man, and was living when the doctor wrote his Family Medicine. In this complaint, blisters, bleeding, mercury and the blue pill, are prescribed. Of the evil effects of mercury, we have already spoken; of bleeding, the reasons are strongly against it. The blood is the great vehicle of life and health and heat to the whole system; How then can draining the fountain of life, add to its duration? The pernicious consequences of blisters have been often remarked by practitioners. Dr. Hillary remarks, "cantharides contain a great quantity of alkaline semi-volatile salts, which pass into the blood by absorption, and increase both the stimulus and the momentum of the blood, and attenuate, dissolve and hasten its putrefaction, and produce heat and strangury in the urinary passage."

Now the medicine and mode of treatment recommended by Thomson, have removed both these diseases, in cases almost innumerable and in their most desperate and hopeless stages. It is the purpose of these lectures to declare a remedy, safe, certain and successful, which has never been known to fail, when properly applied; a remedy which has removed, with powerful and salutary effect, the most fatal diseases of our country; fever, hepatitis and pulmonalis; a remedy which restores and invigorates the system; leaves no taint, no debility, no lurking death behind it!

The cases to support this fact can be easily examined and certainly known. No one need be deceived, if they only take the trouble to institute the inquiry, and surely the life and health of our friends and families demand the trial.

It is not a light thing for which we contend; but a matter which regards the precious life.— Without health, no state nor prosperity can be enjoyed, and when sickness comes, to have to encounter remedies, at best uncertain, and often direful in their consequences, adds an immense load of anxiety and grief to the already suffering patient, together with all that the friends and relations must suffer. But it is the cause of humanity at large, and the business of every man who has a common interest in the welfare of the human race, of all who would lay claim to benevolence of heart to endeavor to reduce the sum of human calamities. What joy would it not yield, to see our neighbors arriving at a good old age; their days spent in firm health; their diseases few and soon removed, their time and space and money saved? These considerations, when contrasted with the present state of things, when men do not live half their days, would be as a new birth to the renovated and redeemed world!

And I am persuaded that, if ever the arrow of death has pierced the happiness or entered the abode of those who hear me, they will not lightly hear the proclamation of that hope, that their diseases may be safely relieved and healed; and the heart-thrilling anguish of losing a beloved object, dearer than our own souls, on every trivial complaint, be forever extracted from the breast!

Dr. Thomson very shrewdly remarks, “a number of the doctors discovered that the effects of my medicine were astonishing; and therefore concluded it was poison. This can be easily accounted for; because they have no remedy in their medical science capable of producing a powerful effect on the system, except what is poisonous.”

And it is astonishing and will remain as an as-

tonishment to future ages, that the very rankest poisons are the principal remedies now in use in the world, and have been for at least fifty years past. It would be a melancholy tale, could it be told, the millions who have perished through this practice.

The stream of popular feeling is, however, on the turn; and we have no doubt, but the hue and cry against it will be louder and longer continued than it has been against Thomson and his practice. It is a promise of God to the world, that men shall be brought to a knowledge of the truth; that the earth shall rejoice, because of the out pourings of the beneficence of Him who dwells amidst the dazzling light of vast eternity.

LECTURE XI.

A GENERAL REVIEW OF THE NATURE AND OPERATION OF THOMSON'S REMEDIES.

The great and general advantages ascribed to mercury, by the physicians, were to pierce and penetrate the system; to remove obstructions; to restore action to the parts affected, and equalize the excitement. The liver was said to be impervious to every other medicine; and hence its universal application in diseases of that organ. From this, it extended its empire over all, and reigned triumphant over every other remedy. In the more simple cases, worms, colds, indigestion, costiveness, cough, sore throat, or whatever else you could name, mercury was the cure for all.

1st. Lobelia, discovered and used by Thomson,

will penetrate the system, equalize the excitement, remove the obstructions, cleanse the stomach and bowels, purify the blood, remove diseases from the lungs and liver, in a manner far superior to what ever was accomplished by mercury. While it possesses this advantage, which mercury never had, it acts in harmony with all the principles of life; leaves no taint, no disease, no racked and decaying bones, and deformed countenances behind!

This simple fact, whatever may be said to the contrary, will set it at an immense distance above all the fame that mercury ever can acquire. I think, as I am writing these words, of that awful and terrible day of decision and despair, when all the forms and faces which mercury has mutilated, shall be arrayed against the system of practice; but against lobelia, not one in all that countless multitude to show a decayed bone, or deformed feature. The members of the faculty, now so busy in abusing Thomson, could they behold this; could they anticipate this scene; would employ themselves in devising methods, if that were possible, to remunerate the world for the evils they have done it, and the miseries they have inflicted on its inhabitants!

There are men of mind, said Dr. Barnwell, who will, I am convinced, profit by the experience of past practice. If it were not for that idol, self interest, which so many worship, there would be little difficulty in profiting by past experience.

The mind that is open to conviction, and determined to pursue truth wherever she may guide, will derive lessons even from its own mistakes, which may prove salutary to itself and to the world. O! how grand is that character that can rise superior to sense and selfishness, and cling to the radiant glory of immutable truth.

Lobelia is a most active and powerful medicine; its effects are to cleanse the stomach, remove obstructions and promote perspiration. It is, perhaps, one of the most valuable remedies of the vegetable kingdom. It is the *Lobelia Inflata* of Linnaeus; but it does not appear that its medical qualities were ever perceived or regarded by the physicians. It is a specific in asthmatic complaints. A lady who had not been able to lie in bed for six months, with an asthmatic complaint, by the use of this vegetable tincture, slept in bed the first night of using it, and has enjoyed a comfortable state of health ever since, upwards of twelve years.

Dr. Thomson says of this herb, "it is most powerful in removing disease, and safe in its operation. I have given it to infants of a day old, and men of eighty years; it is innocent in its nature, moving with the general current of the animal spirits. There are two cases where the medicine will not operate; when the patient is dying, and when there is no disease. Where there is no enemy, there can be no war; in the healthy system, it will be silent and harmless." "It is calculated to remove the cause of disease and no more, as food to remove hunger." "It clears all obstructions to the extremities, not regarding the name of the disease, until it produces an equilibrium in the system, and will be felt in the fingers and toes, producing a prickling feeling like that caused by a blow on the elbow." It is also, he says, of great value in preventing, as well as in curing disease; a little of it taken into the stomach, when a person feels unwell, will immediately throw off the obstructions or causes of sickness, and save the person from a long attack of pain and fever.

3. *Capsicum*.—It has long been a subject of deep importance to physicians, to find a stimulant

at once powerful and not narcotic. Bark and spirits both fail in this respect, and laudanum destroys sensibility and deadens the vital powers: the system is partially destroyed by its action; for it is hostile to life, subverts the natural functions, and is itself an obstruction of the offices of life. Capsicum supplies this grand desideratum. It is a stimulus, powerful and permanent; not narcotic, nor destructive to the vital functions. It is said to have been found effectual in curing diseases which have resisted all other medicines. It supports the natural heat of the viscera and interior action, beyond any thing heretofore known, and has been used with great success in the cure of spotted fever. Like the former medicine, it seems to be safe and salutary, perfectly in harmony with nature and the most active stimulant to support and re-animate her feeble or exhausted powers.

3d. In the mode of expelling the virus or morbid matter from the blood, the physicians have been most divided. Some have recommended perspiration; others, salivation, friction, bleeding and purging and the use of mineral waters. Dr. Thomson's composition medicine, to remove this morbid, purulent matter from the system, has been found extremely effectual. It is a compound of four or five different herbal productions, and, in purifying the blood and cleansing the whole internal man, stands without a rival. A variety of herb teas have been used in the spring of the year to purify the circulation, but they have not been found sufficiently powerful to expel the dregs of disease from the system. This composition of Dr. Thomson, in that respect, stands pre-eminent in all the cases in which it has been properly applied, according to the established direction.

4th. *Bitters*, to correct the bile and promote di-

gestion, consist of another composition of herbal medicine, and are of great importance to the health of our country; they ought to be known and used in every family. From the nature of our climate, subject to great and sudden changes and irregularities; from the abundance of fruit used in a crude and improper state, and the vast use of fresh meat, frequent and great irregularities will and do take place in the digestive organs and gall-bladder and biliary ducts. Diseases of this complexion are, perhaps, by far the most numerous in this country; and, to guard against them is the imperious duty of every individual. It is impossible to retain good health without due attention to the state of the stomach. Many men have made fortunes by the invention of bitters for the use of the stomach, but, on trial, none have been found equal to those prepared by Dr. Thomson.

5th. Another composition for dysentery and the summer complaints of children, and all complaints of the bowels, has been found, on trial, to be highly beneficial. This disease of children has long baffled the physicians' skill; it has been confessed, by the most eminent of the faculty, to be very little under the control of medical skill. This medicine has been found to afford instant relief.

6th. Rheumatism, a severe and most painful disease, which has been often given up as incurable; the application of Dr. Thomson's rheumatic drops and other medicine to relieve the system and equalize the excitement, has established a perfect cure, when every other application failed. A man at Columbus had suffered by this disease for years; and, like her in the Gospel, had spent all his living on physicians, and grew nothing better, but rather worse, until he was drawn together, quite bowed down by the severity of the pain and

unable to walk. He had for some months been given up by the faculty and resigned to his fate. The medical botany doctors took him in hand, after this new practice began to be known in that town, and restored him in a few weeks. The faculty would not believe it until the man was produced, walking straight as a line to their utter amazement.

7th. Opium has been almost exclusively for years used to quiet the nerves and still restless children. Many a poor infant has suffered death by the administration of this deadly drug, and many a stupid head and stupified person has it sent into the world; never to speak of the multitudes it has sent out before their time. It is a most deadly drug, and seems to destroy the vital actions of the whole system. But, say the physicians, it relieves pain. Yes, it relieves pain by deadening sensibility. A bullet or dagger will relieve pain in the same way. But the important question is, Will it remove pain by removing the cause of pain—disease? Will it not, on the contrary, give force to the disease, by weakening the vital functions? Does it not establish disorder in the system by rendering all its powers torpid?

Dr. Thomson's nervine has a more powerful effect, by ten fold, in quieting the nerves, promoting sleep, soothing and stilling the tumult of the whole system; is perfectly safe and harmless in its application; has none of the narcotic qualities nor deadly stupifying effects of laudanum. It promotes ease and comfort and leaves no dregs of wretchedness nor dream of insanity behind! Now, nothing can so recommend a medicine, as to be certain it will produce the end designed, and none of all the evil consequences not designed, but deprecated by the faculty, but which they have no means of preventing.

Dr. Thatcher says, arsenic, in cancer powders, has been absorbed by the patient, so as to cause death, by consumption, in the course of one year.

Beware, says Dr. Thomson, of all minerals used as medicine; such as mercury, arsenic, calomel, antimony, all preparations of copper, lead, iron, vitriol; also nitre and opium: They are all poisons and deadly enemies to health. Beware of bleeding and blistering; they are destructive of health; avoid searings and issues; they are hateful, nauseous and drain the very sources of life; they never did and never can do good! Shun them all, as opposed to life and its vital functions.

Now, it may be said, in justification of the faculty, that, using the medicines they do, the fatal consequences they are not able to prevent. If it be replied, then let them not use such medicines; the answer is, they have none else to use! What are their active remedies, which are not poisonous and destructive to life? "Mercury," says Dr. Rush, "is the *Goliath of medicine*." It is certainly a Goliath to destroy; it is the uncircumcised Philistine of medical science, who defies the living armies of the living God. The numbers slain by his arm, let India and America and the world witness.—The multitude of the valley of Hammon Gog would not equal their countless hosts, if mustered on the field of the slain or arrayed before the eyes of the world.

The "*heroic medicines*," as they are emphatically called, deserve indeed a considerable share of the praise of the Cæsars and Alexanders of the world; powerful to destroy, heroic in blood and havoc and devastation. It was the boast of Alexander—"I have made Asia a desert; I have trampled down its inhabitants and prostrated its ancient renown."

8th. It is a point conceded by medical writers, that the operation of medicine does not depend on any of the common laws of matter, but on the principle of vitality alone. Now, from this concession, the theory of Dr. Thomson is established; for he affirms, the great value and success of his medicine depends on this principle, that it is in harmony with the vital powers. As the operation of medicine depends on the principle of vitality alone, it must harmonize with the vital principle; or, otherwise, so far from being a remedy, it would be a poison; because, depending for its action on the principle of life, if its action be in opposition to that principle, it cannot restore health, but destroy it. And this very conclusion of Thomson's theory, is in perfect accordance with the physicians' doctrine, but in opposition with their practice.

Every animated being is endowed with a primordial principle of life. This principle, resident in the egg of animals and the seeds of plants, constitutes the power by which, in the first place, the various organs are moulded, developed and perfected, and by which, afterwards, the animal economy is maintained and defended against the action of mechanical and chemical laws. Now, it is evident that medicine thrown into the system directly hostile to this active and repulsive power, must have the most pernicious effects on life and health. The principle of life may struggle for a time, but must sink at last. I know, in reply to this, it will be said that this principle of life, by the power of the digestive and assimilating organs, will change or destroy the qualities of substances exposed to their operations, if repugnant to its nature, without sustaining any injury itself. This is truth only in part; for this power of assimilating is often overcome and life destroyed. If it were otherwise, it

would matter not what we might eat or drink; what medicines we received. But we know the contrary to be a fact. Why so much direction and caution to patients, respecting the qualities of their food and drink? Why the terms harsh medicines, severe medicines, dangerous medicines? They all establish the same conclusions; the necessity of guarding the principle of life; the value of Dr. Thomson's remarks, that proper remedies must be in harmony with the principle of life.

There is a unity and beauty in truth; it is not like error, multifarious and infinite. It was remarked by an ancient sage, that there was but one road to Truth, and that difficult to find; but the ways to error were innumerable, and every fool could walk in them. It requires no meditation, no thought, to establish or deliver systems of error. The greater the madness and less the discretion, the better is the publisher qualified to propagate falsehood and detaillies.

Between the physician who theorizes in his study, and the one who establishes his theory on facts and experience, the difference is as wide as between a novelist and a writer of true history. The historian gives us human nature as it is; the novelist, as it is not.

Dr. Thomson gives his pharmaceutical preparations from his own trials, observations and experience. Many others write theories, and then found their practice on what they have written. Thus, medicines repugnant to life are given to the patient; he has to struggle with the morbid excitement and additional hostility of the medicine, until the whole system, languid and decayed, sinks under the attack which it is no longer able to repel. Now, from the very nature of the operation of medicines, as they are designated by the faculty,

“that their operation is either local on the stomach, and diffused over the system by sympathy; or general, being thrown into the circulation and conveyed through the whole body;” it would seem to be of the highest moment that they should be safe and salutary in their nature, to commingle with all the streams of life, and pervade the extent of vital action.

It is a fact, admitted by physicians, that between medicine and certain portions of the body, an intimate and specific relation exists. Now, if this be notorious, as it is, will not a general specific become a universal remedy? For these consequences must necessarily follow, that, while an action is going on in a diseased organ, if the remedy be only a partial specific, though it may be salutary to that particular organ, it may disturb the order of health in every other organ in the system, and create morbid derangements throughout every other part of the body. And this very consequence we perceive in mercurial medicines; while they relieve the liver or subdue fever, they are creating ulcerations in the mouth and glands of the throat, diseasing the bones and exciting deadly tumors in other parts of the body. The medicines, therefore, which are partially specific, are dangerous medicines; though, on this well known fact, the whole *Materia Medica* is based in its order and classification.

Now, a safe medicine must be a universal specific, possessing an intimate relation to the whole body; that, while removing obstruction from a particular organ, it may not excite morbid action in others. And such has Dr. Thomson's medicine proved on trial. He has affirmed it to be of that nature, and the whole of the experience confirms the fact that, while removing disease, it produces no morbid derangements.

Arsenic and tartar emetic, as has been found after death, produce the most deleterious effects on the stomach; and yet they are given to remove disease, and called excellent remedies; but are now denounced by those who are disposed to purge the *Materia Medica*, as may be seen in the *Transactions of the Royal Society*, for 1811—12. Corrosive sublimate kills, by acting chemically on the mucus coat of the stomach; but arsenic, tartar emetic, and the muriate of barytes, by entering the blood.

The general course of nature, in accomplishing its results, is known to employ means which are proverbially distinguished by great simplicity and uniformity of action. The mode of curing her complaints, we might suppose, should be distinguished by the same uniformity and simplicity. Dr. Chapin, in his *Therapeutics*, has this beautiful remark; "It is more than probable that, on some Alpine height or along the margin of some mighty stream which pervades our wide spread continent, there blooms many a plant, wasting its virtues 'on the desert air,' which, were they known, may be peculiarly adapted to the gigantic form of disease, and capable of reducing the lengthened catalogue of the *opprobria medicorum*." At this period of the progress of these lectures, I cannot help expressing a hope that Dr. Thomson, from his extensive acquaintance with the medical virtues of plants and herbs, would make out; for the sake of neatness and precision in his pharmaceutical preparations, a complete system of medical botany, or a digest of all the plants, in classification, with a particular detail of their efficacy and application in removing disease, the mode of operation and practical results.

If the immense riches of medical virtue inherent in the plants and flowers of the field, were collect-

ed into one volume, it would realise the aspiring hope of the great and good Dr. Rush, the perfect cure of all the maladies of the human race. And the rays of human thought are converging on this sublime and grand and awful elevation—the perfection of the healing art; and will continue to concentrate their energies until the full blaze of glorious triumph shall burst upon the world.

From all the instinctive propensities and rational principles of action, man is induced to shun pain and misery, and remove it from himself, if attacked, by the easiest and speediest method possible. This established law of our nature would dispose us, if left to our unbiassed reason, to examine, and approve if found valuable, whatever might conduce to our ease and comfort in the world. Whatever promises to restore or establish the health of our fellow men, excites a glow of general feeling of gratitude and thankfulness in every benevolent heart; for we do not live for ourselves alone; we live and rejoice in the happiness and joy of our neighbors, and we pine and die in their misery and destruction. Homer stated it as a general, unqualified maxim, that “good men are prone to shed tears.” The silent streams that bedew the earth are supplied from the sources of human benevolence, wept over the woes of others. The tear and the smile are characteristic of man; they distinguish the dignity of human feeling and that divine sympathy which animates the bosom, and prove that the glandulæ lachrymales were not made in vain.

There is one part of the new practice which I wish to recommend to general notice; Dr. Thomson's method of reducing the contracted muscles, in the occurrence of broken bones and luxations. It is very simple and effectual, and has such power and influence over the contracted muscles,

that the patient can have the bone set or the luxation reduced almost without any pain. The great importance of this simple practice need not be impressed on those who have witnessed the agony of setting bones and reducing luxations in the usual and established practice. I have known a piece of the bone sawed off, in order to its being set, such was the contraction of the muscles! This state of terrible suffering to the patient, and moreover being rendered by it lame for life, was so dreadful to behold, that Dr. Thomson's simple mode of reducing the muscles, is of itself, sufficient to immortalize his name if he had never made another discovery.

To the attention of families I would mention and recommend another fact in Dr. Thomson's discoveries, of great advantage to their comfort and happiness; and I appeal now, not only to the feeling and sensibility of parents, but also to their understanding and experience; Is not the mother the most affectionate and careful nurse of her child? Can any stranger know the disposition, the temperament, the peculiar idiosyncrasy of that child, equal to its own mother? None. It is, therefore, impossible for physicians, upon their own principles, to know either the quantity or the nature of the dose of medicine to be administered to that child, equal to the mother; for they, not knowing its peculiar temperament, cannot tell nor foresee, by their utmost skill, what will be the operation of that medicine. It may act right or wrong; kill or cure. The mother is the best qualified to administer, but for one circumstance; she is the most tender, watchful and most perfectly acquainted with the disposition of her child; but she knows not medicine. Add but this knowledge to all her other qualifications, and the mother, for the diseases of infants, would be the best physician in the world, and the best in the most prevalent diseases

of her whole family. I have the authority of Dr. Rush for the assertion, that a sensible mother or nurse, in most of the diseases of children, as superior to the most of physicians.

The practice of Dr. Thomson is expressly adapted to confer on the mother that only qualification which she needs, to render her the best physician, as she is the best nurse, in her family, or to bestow the same skill on every other member of it. For it is emphatically the realization of the fact or the attainment so long sought after, "let every man be his own physician." Philosophers and sages, physicians and patriots have all subscribed to the same maxim.

. Now, Dr. Thomson's system is designed for this very purpose; that every family should practice for itself; that a knowledge of the medicine and its administration should be as familiar to every family as the knowledge and use of their daily bread.

Dr. Thomson has very particularly described the nature and use and preparation of his medicines, so that any one possessed of common sense can prepare and administer them with perfect safety and convenience. How great then must be this addition to the security and happiness of families! I will not even suppose that any can be so hardened as to be indifferent to the health and safety of their children. Now, when the father and mother can administer to them and to each other, a medicine safe and effectual for their complaints, I ask what must be the amount of pleasure, the thrill of gratitude to heaven; to have in charge the lives of their dear ones, rather than be obliged to entrust them to the care of a stranger?

Reflect on this, my dear audience, and ask those families who possess the right to practise, what they would take to be bereft of this knowledge and this medicine, Make the trial, and I am convinced

you will meet with answers that will astonish you! A gentleman told me he would not take all the State of Ohio to be deprived of the use of this medicine in his family! No, because he loved his wife and children far beyond all the riches of the world. I was deeply impressed by the observation, because it came unasked and with a sincerity and solemnity of manner which I could not mistake. Those who have tried for years, in their families, the efficacy of this medicine, cannot surely be deceived. Men of sense and science have made the experiment, and I have not yet met with one who expressed the least disappointment, but, on the contrary, declared the fullest confidence.

I hope my fellow citizens will weigh well the amount of testimony on the side of this new discovery. Give it a fair trial, implore the aid of the God of mercies to direct their decisions and crown them with success, and precious lives may be saved to adorn society and be a blessing to their friends and an ornament to their country.

LECTURE XII.

REVIEW OF DR. THOMSON'S REMEDIES.

"Fever, of every description," says Dr. Chapman, "has its origin in local irritation, which is spread more or less according to circumstances." "The stomach, however, from its central position and extraordinary sympathies, seems to be the organ most commonly at first affected; and, when the morbid action is not at once arrested, diffuses itself by multiplying trains of associations, till the disease becomes general, involving in a greater or less degree, every part of the animal economy." In this way, he remarks, diseased impressions made on the stomach are imparted generally, in the first place, to the chylopoietic viscera, to the

heart, to the arteries, to the brain, lungs, skin, capillaries and other important organs, until they embrace within their scope the whole animal machine.

Now, from this very theory, the great utility of Thomson's medicine is clearly established. According to this system, the beginning of fever is irritation in the stomach, affecting the organs of chyle, the heart and arteries, and ending in the capillary vessels. The two first parts of Thomson's practice are directed particularly to the first and last of these troubled organs; lobelia, to remove the disease and irritation from the stomach, and steaming, to remove the obstruction of the capillary vessels and force the disease from the anterior organs. Of the power of lobelia to cleanse and relieve the stomach and purify the internal organs, I have spoken already. Of the value of steam, nature herself will teach man; it being one of the most important channels (perspiration) by which she throws off the morbid matter which weighs down to the grave the oppressed and exhausted system.

It has long since been remarked by physicians, that a profuse sweat and calm sleep were the harbingers of returning health to their patients; they indicating the crisis of the disease. Dr. Thomson's medicines produce these signs of gentle health returning immediately. As soon as the operation of the lobelia and steam has ceased, the patient sinks into a quiet slumber, and rouses only to demand food, to the great astonishment of all who have not witnessed the fact before, but have been only acquainted with the vomits of tartar emetic and their results. The source of the disease being thus removed, the heart and arteries are at once restored to their healthy action; the fever ceases and

strength and activity are restored. The man himself is amazed at the sudden change.

“In the treatment of fever, says Dr. Chapman, venesection, puking and purging are resorted to, to relieve the general circulation. But, the capillaries being affected, we must resort to medicines acting more immediately on this set of vessels; as blisters, diaphoretics and mercury; which last, is of universal operation, pervading every part and entering every recess of the body.”

Now, the first of Dr. Thomson's remedies will accomplish more than this all-powerful mercury; and steaming will act on the capillaries enumerated by Dr. Chapman, to remove fever; three for the internal structure, and three for the external; but one of the latter, mercury, acts universally on both. Now, of all the six remedies, four, tartar emetic, mercury, purges and blisters, increase the cause of fever, which, Dr. Chapman says, is irritation; the fifth, venesection, diminishes the power of life and weakens the force of vital action; the sixth and last, diaphoretics, may be considered as the only one of the six which does not exasperate the cause of fever, irritation. And this is, no doubt, the reason why fevers are so long in continuance before they are broken, in the common language of practitioners. You may perceive the fever, at the beginning, small; no particular excitement to be regarded as dangerous; but, after a few doses of the above remedies, the irritation is so increased as to threaten life; you are then told the disease is hastening to a crisis. But it is strange that the remedy should not arrest the disease, instead of awaiting the crisis. It is at once conceding that the remedies have no power over the disease; they cannot stay its progress. Then they are not proper remedies, nor fit to be relied on by those who have in charge the protection of human life.

The remedies of the new practice can be relied on, with a confidence derived from an experience of forty years, in which they have never been known to fail in removing fever. This gives confidence to the practitioner and warrants the assertion that they are superior to any thing now in practice among the physicians; that the citizens have only to make a fair trial to determine for themselves. To relax the excretories, in removing disease, Dr. Cullen considered of the greatest moment. Steaming, and the medicines received into the stomach in Thomson's practice, relaxes these organs by producing a solution of all the external and internal obstructions, and have a power of expelling fever, which was never before known.—The vitiated humors and putrefactions caused by morbid action, are at once purged out of the system; a tone of health and animation and serenity of mind ensue, of which a person can hardly conceive the amount, who has not witnessed the operation and its consequences.

The more we examine Thomson's system, we find its principal features agree with the most popular and received opinions of ancient or modern times. "An opinion, universally received," says Dr. Cullen, "is, that noxious matter introduced into or generated in the body, is the proximate cause of disease; and that the increased action of the heart and arteries, which makes so great a part of fever, is an effort of the *vis medicatrix naturæ* to expel this morbid matter and particularly to change or concoct it, so as to render it either altogether innocent, or at least fit for being more easily thrown out of the body." This doctrine, of as great antiquity as the first records of medicine, has been received by almost every school of physic down to the present day; and even those who have

rejected it, are obliged to speak of the vitiated humors expelled by the capillary vessels. Now, the very essence of the Botanic system is to expel those morbid humors, together with the corruption and putrefaction of the internal diseased organs, and, in accomplishing this, it has no parallel. The coagulated and congealed pus and purulent matter, thrown off by this medicine from the system, would perfectly astonish a stranger to its operation and its efficacy.

Whether, therefore, we consider disease to be occasioned by the diminished energy of the brain; by general debility, direct or indirect; by spasm in the extreme arteries, by lentor, visciditv, tenuity, acid, or alkaline acrimony in the mass of the blood; or morbid matter taken into or generated in the system, or impressions on the nerves adverse to life; it is no matter which of all these be the cause of the disease, the remedy here recommended is equally powerful to expel it, because its operation is universal over all the organs, healthy and diseased, to strengthen the one and purify and restore the other. I know it may look, to those who do not think deeply, like quack boasting, to say so much in praise of this safe and simple remedy. But let those who are capable of thinking, and who will take the trouble to think, revolve over the following facts:

1st. The medicine has been tried by an experience of upwards of forty years, not on a few diseases nor a few mild cases, but on every form of disease incident to our country, and on cases the most dangerous and desperate; on diseases absolutely incurable by the faculty, and given up as such by them! And yet, by the application of this medicine, they have been perfectly cured, or so far mitigated as to render life useful and a bless-

ing, both to the patient himself and his friends and family.

2d. This new practice has extended over most of the eastern and many of the western and middle States, and is still advancing in power and reputation. Even in childbed delivery (a matter never to be forgotten) the practice has very nearly removed the pain and punishment from the daughters of Eve, threatened to our first progenitor, and entailed upon her offspring. A lady of great good sense, and without the least coloring of imagination, said it was easier to have five children under the operation and influence of this new practice, than one by the other management and medicine; and she had experience in both cases, and has been supported in the evidence by every one who has followed her example.

3d. The efficacy of this medicine has become a part of the public history of our country. The records of the Legislature of the State of New York, have stamped upon it their high approbation. It will form an epoch in the medical science of the great republic of the western world. Dr. Thomson's system had been very extensively introduced into the State of New York, and had met with unrivalled success, which excited the fears and jealousies of the regular physicians. They, in order to protect themselves, procured the passing of a law, the most unjust and unconstitutional that could be imagined, to arrest and extirpate this new practice, by preventing the practitioner from collecting his fees. This measure resulted, as might have been foreseen, in a country of equal rights and privileges, in great excitement and numerous petitions to the Legislature to abolish the invidious law. The Legislature appointed a committee of five of their members to examine into the

merits of the case. The official report of this committee is now on the records of the House of Assembly, and has become a part of the public history of the United States. The report is too long to be here quoted, but ends in this important particular; "The practice of Dr. Thomson has, in a great many instances proved beneficial, and in no case deleterious." The petitions were sent in from at least one-half of the counties of the State of New York, and were supported by the evidence of the most respectable and intelligent men. Now, when all these particulars are carefully weighed and considered, it will be found, they bear with them a testimony as fully entitled to credence, as any thing that ever issued from the schools! an evidence, such as quackery never could establish nor exhibit. Here are medicines, known, tried and described, in their efficacy and operation. The legislative wisdom of the first state of the Union, has, by their committee, after the strictest scrutiny, and investigation, stamped upon them the seal of their testimony. The practice assumes a character altogether distinct from the arts and devices of deception; with the gravity of philosophy, and the attitude of truth and benevolence, it stands before the world. The scrutiny of friends and enemies has searched it through, and there is yet no decisive testimony where it has absolutely failed, unless where death had laid his stern arrest on all the doors and passages of life.

Physicians rely much on the reaction of the system, in the cure of disease. But in order to secure this reaction, it is necessary to preserve the vital powers of the system; for, how can reaction take place in an exhausted, prostrated condition of the living powers? The conservation of the vital powers, or, as some have termed it, the conserva-

tive powers of the animal life, ought to be cherished by every means, in the treatment of the sick; and that practice will ever be found best, which best preserves the conservative power of nature; a power that will, of itself, prevail over disease, if not overwhelmed by a too potent enemy. I know the advocates of the heroic medicines, have called the timid and the cautious practice, "a meditation on death! But the facts speak for themselves; the "heroic medicines" have left behind them, if not a meditation on death, "a history of graves," sufficient to blast their reputation, exterminate their existence and alarm every benevolent heart for the welfare of society.

Dr. Cullen, in recounting the remote causes of fever, supposes cold to act in conjunction with the unsearchable qualities of the air, in promoting disease. In all its operations, he remarks, "cold seems to act more powerfully in proportion as the body, and particularly the circulation, lose their vigor or are debilitated." The second number of the new practice and No. 6, have more powerful effect in counteracting this cold and supporting the vital heat of the system than any thing used in the old practice. There is a kind of what may be called the tyranny of fashion, in medicine, as in all other things. The "heroic medicines" have become so fashionable that, though they should kill and deface, it is of no account, still they are heroic medicines! and if the patient dies, he dies heroically!

Were I to recount the invaluable advantages of this new system, it might astonish the ignorant and admonish the wise, while both would be drawn into an extensive field of remark and meditation.

1st. It abolishes the intolerable lumber of nosology and symptoms, habits, temperaments, dia-

thesis, prognostics and critical days, about which volumes have been written and millions of lives sacrificed.

2d. It purges from the *Materia Medica* all the useless, and what is of infinitely more importance, the poisonous and pernicious remedies.

3d. It reduces the idle and endless details of pathological ingenuity, respecting the remote, exciting, predisposing, and proximate causes of disease, to one simple cause; morbid action or obstruction.

4th. It has abolished the uncertainty of practice, which has always been evinced by the change of medicines, adopted by the regular practitioners; a tacit confession that they knew not what remedy would remove the disease. And when they thought they had discovered the proper remedy, that remedy was but too often the messenger of death! The cold hand of the destroyer was upon the patient, which was mistaken for the departure of the fever. I will instance the example of Dr. Rush, in the yellow fever. He thought he had discovered, in blood-letting, an infallible specific, and proclaimed to the citizens of Philadelphia, that he had the fever reduced; under this practice, as completely as a common cold; that they might safely return to their homes. But, alas, look at the results! bleeding was certain death to the poor, suffering patient; life sunk in proportion as the vital steam was exhausted. They might have had a more easy bed, but they had certainly a more speedy death! Every one is now convinced of the fatal consequences of bleeding in that stage of fever; and yet, that venerable physician, so eminent for his skill and success in practice, believed it to be a sovereign remedy; at least, he never contradicted his former assertions.

There is one criterion which physicians seem to have overlooked; that, when their practice aggravates the disease or hastens death, they may be sure it is wrong. And yet, this they seem never to have considered with due attention; ascribing to the disease what they ought to attribute to the remedy. They appear to have lulled their consciences, and pursued their course although it led down to the chambers of death. Far be it from me to impute the want of humanity or a disposition to destroy, to a class of learned and respectable men. But certainly we may affirm, in the spirit of charity, that when they find a remedy not only failing to produce the desired effects, but absolutely producing deformity and death, it ought to be discarded. A remedy worse than the disease, is no remedy; it may hold the rank by prescription; but it is an authority as unhallowed as the tyranny of eastern despots.

The rich are able to afford to nurse their complaints and pay their physicians; the poor can do neither. This is the true reason, and not credulity, why they are prone to employ quacks; they are promised a safe and speedy cure, at small expense. Their necessities, and not their want of sense, force them to run the risk; and dearly do they often pay for their confidence. Still the principle which urges them on to the adventure, is a good principle; and the feeling, one of the most noble in human nature, the love of independence. In the trial, they are moreover influenced by a principle which has in all ages operated equally on the learned and unlearned; that the Deity has placed the remedies for disease within the reach of man; not far from any of us, had we but the skill or the good fortune to discover them. When a new remedy is, therefore, published, there is a natural impulse in

every mind to try its efficacy; and if the rich and the learned are more cautious than the poor, it is because they are not urged on by the same necessity; and not because they have not the very same inclination. The pride of learning and the pride of wealth, may stand in the way; but God has formed our hearts alike. And this universal sentiment, impressed upon the hearts of mankind, is, like the argument for the immortality of the soul, a proof that the remedy exists, and shall be discovered in due time. And the very existence of quackery, like false bills, is a proof of the truth, that the genuine remedy exists, and shall come forth, not from the schools and colleges, but from the casual discoveries of the people; the result of chance or necessity. Quackery never could have existed but for this innate sentiment of man. Every deception practised on the human family, in the healing art, has been predicated on this principle of the human breast. If it were a fact, that we believed the cure of disease could only issue from the wisdom of the schools, quackery might proclaim his skill in vain; not a soul would lend him a single moment's regard. But the very contrary is the fact. We feel it as a part of our nature, that remedies the most powerful and efficacious, are scattered round the paths of our feet; and in an instant may be discovered, like the Tyrian dye, without labor or learning. A discovery that will not, indeed, clothe the kings and courts in purple; but will clothe them in health and peace, and banish disease from the inhabitants of the earth.

Dr. Rush was deceived by one of his former pupils, Dr. Brown of Pittsburgh, who returned to Philadelphia and informed his former tutor and friend that he had discovered a vegetable remedy for cancers, which was an effectual and safe cure,

The good and benevolent Dr. Rush was transported with the idea that this terrible disease at last had found an antidote, well knowing the deleterious effects of arsenic, and its inefficacy to remove the complaint. But, alas, he was sadly disappointed. Dr. Brown died; Dr. Rush bought up the remedy, and, as his former pupil refused to inform him of its nature or composition, he resorted to an analyzation of the substance, and found, to his great mortification, it was but the arsenic disguised by some simple, useless, brown bark of a tree!

This is a proof, from no common man, that the cure for cancer might be the result of chance, rather than study. Nor did the deception, in this instance, remove that confidence. He still believed to his dying hour, that discoveries in a very simple manner, would be made, to cure cancer and all other diseases. Let not the poor then, be charged with credulity. They exercise a principle on which the faith and hope of the great and learned have revolved, in every age of the world. But deception, like false gold, is capable of certain detection and infallible exposure. It only requires us to beware, and not to be too hasty in our conclusions, to sever the deceiver from the man of integrity and virtue.

The people are not to be blamed for their great caution in admitting the Thomsonian practice; the only blame attaches to that kind of hostility and vengeance by which it has been pursued. The deception practised upon society, under the name of remedies, requires caution in the people, and warns the multitude to beware. But, so far from shewing hostility, the course which nature and common sense prescribe, is to carefully listen to the narrative of the discoverer; examine his medicine and his cures. Let every case be stated with candor and

impartiality; the state of the patient, the duration of his disease, the remedies he has used, and their effects upon him; his state when the new practice commenced with him, and its operation and consequences. This is but a fair specimen of trial, and the way in which all the regular physicians proceed. When called to difficult and doubtful cases they write out an exact history of the patient and his disease, the course of treatment he has pursued, the state in which they find him, the plan of their own remedies, and their failure or success; as an admonition or encouragement for future practice.

Now, I am thoroughly convinced, from all the information which I have been able to obtain on this subject, that, were Thomson's practice submitted to the same fair and impartial trial, it would be found, I will not say a remedy for all diseases, but it would be found to alleviate the most inveterate, to cure the most doubtful and dangerous, to injure none; and where it failed, it failed from the obvious reason that death had already laid his cold and icy hand upon the life of the patient.

There is nothing in the history of quackery to be at all compared to Thomson's discoveries. Every thing in his Narrative carries with it the face and air of an honest man, acting for the good of his country, and desirous, like other men, to live by the honest industry or profession of a new system of curing disease, a profession which, if it shall be found on an universal trial to be as beneficial as its high and early promise has inspired, his country never can repay, nor the world calculate the price. It is not supposed that this system is arrived at perfection, or at all attained to that state of pre-eminent elevation which it shall yet assume; but we believe the foundation is laid of a system of cure, susceptible of advancing, until it shall comprehend

the wants and miseries of the human race, in the extent and compass of their diseases.

Dr. Thomson had this opinion from the effects he himself had seen; and his Narrative is convincing from its very forms and features. He tells us he was illiterate, and he was poor, oppressed by a young, helpless and sickly family; that the practice pursued did not agree with their constitutions, nor diseases; he was from nature inclined to try the virtue and operation of plants; the gift of healing, it was impressed upon his mind, God had given to him; necessity, when his family were dying, forced him to try; he was successful; success encouraged him to go on; his neighbors applied to him in the hour of calamity; he relieved their complaints, his time was consumed, his reward nothing; he consulted with his wife and friends, whether he should abandon the practice, or abandon his farm and yield to these pursuits; he was counseled to follow his own inclination. Still believing he had a call from Providence, and a degree from the God of nature, he commenced, in form, the healing art. His cause and claims are before the world; laid before the Government of his country; his remedies submitted to the experience of scientific men, and eminent physicians; tried by a jury of his country for his cures, and even perjury could not substantiate a plea against him! This is something very different from all the pretensions to the healing art ever yet set up in the world.

LECTURE XIII. THE POWER OF THE THOMSONIAN REMEDIES.

Dr. BROWN, in recommending his system, said, the theories of disease were so tedious, uncertain and incomprehensible, that he despaired of success,

and sunk into apathy. There is certainly great truth and much matter for meditation, in the remark. It must be distressing to a feeling mind to perceive, after many years spent in study, the poor success of all his efforts in the healing art. In Dr. Rush's remarks on Dr. Sydenham, I was much struck with the great uncertainty of medical knowledge, and the little progress of medical science.—Dr. Rush says, of that eminent physician, Sydenham, “he first took the cure of disease out of the hands of nature; his remedies were either altogether new, or they were used in a manner before unknown to other physicians!” Remedies altogether new, or used in a manner before unknown, would certainly, at least in the judgement of Dr. Rush, go to establish the fact, that the medical practice had been wrong from the beginning of the world, and only put on the garb of truth in England in the seventeenth century, under the highly favored Sydenham.

These observations on the treatment of disease, by medical writers, and the sad failure so often obvious in critical cases, and what are called new diseases, will more than justify all that has been uttered by Dr. Thomson in praise of his remedies. He was drawn before the public eye at a period when a new disease threatened to desolate the country; the physicians were not successful in their treatment; great alarm and excitement prevailed; he exhibited his remedies, and was every where successful! The mortal rage of a wide-spreading epidemic was arrested in its course, and health revisited the land.

The alarming disease referred to above, at Alstead and Walpole, was called the yellow fever. It continued for forty days, and was very fatal; the physicians losing half their patients. Dr. Thom-

son lost not one ! In cold plague and dysentery, he had the same success. Now, the practice which so evidently surpassed the whole professional art, must have been not only above all praise, but a general blessing to the human race. The time will come, said the incomparable Hooker, when three words spoken in charity and meekness, will receive far more blessed reward than 3,000 words with disdainful wit and bitterness of spirit. With charity and meekness then, let us examine the causes why certainty and perfection have not attended the progress of medical practice.

1st. Man is naturally prone to theories, for, to think, is to theorize, says Dr. Cullen, and, pursuing the bent of his inclination, he is more disposed to reason than to act; to speculate than to experiment; to found a system rather on argument than observation, and hence his real knowledge of the cure of disease bears no proportion to the extent of his science; formed in the schools, rather than the sick chamber, he is much more of a philosopher than a physician, and could measure the distance of a star better than the depth of a disease.

2d, The systems of philosophy to which they were attached, influenced the practice and theory of the physicians; one intermixed the philosophy of Plato, another of Epicurus, and a third of Aristotle. The classification of plants and animals, led to the classification of disease; and the atoms of Democritus, and transmigrations of Pythagoras, found their way into the pathology of the medical schools. It is equally curious and admonitory to trace the history of medicine, and observe how curiously the ancient philosophy is interwoven with the curative art, and mingled up with the human system. All this, certainly, has not only the appearance of learning, but is learning itself; it evin-

ces great refinement and cultivation of mind, progress in knowledge and the wisdom of science. But is all this calculated to aid in the cure of disease? May not a long life be spent in obtaining knowledge, and yet the particular knowledge necessary to a skillful practitioner be far distant?

Conversing with one of the most candid and kind physicians whom I have ever known, on this very subject, he at last replied, "well you must confess, that if we have not advanced the certainty of medical practice, we have advanced science." That I readily granted; and I now add, with much pleasure, that some of the most able and scientific men I have ever known, were physicians; but they were more devoted to philosophy than to their patients; and could converse much better on Newton's *Principia*, than on the cure of disease. A taste for learning, and a disposition for watching the painful progress of disease, through all the slow and lingering stages of diathesis and death, are very different qualities of mind.

Man, from the very activity of his nature, is prone to overlook the most simple and obvious truths, in order to rush to some far distant and unknown discovery. Animals, when they have satisfied the wants of nature, and the calls of appetite, lie down and sleep; but man continues awake to contemplate the universe, and survey the busy scenes around him. Himself, the first of all objects of contemplation, he generally knows least and last of all. How slow in its progress was the philosophy of mind, in comparison of other systems of science; almost within our own age, it first assumed the garb or semblance of truth. The soul, that thinking thing within us, the most valuable and important, it might have been supposed would have been better understood than any other object

of thought; but the reverse was the fact. Will not this account for the fact, in the language of Lord Bacon, that medicine was labored but not improved; that its advancement was in a circle and not in progression?

The new school of France seems to be well aware of this truth, and have retired back to the simplicity of nature; to those days of primitive manners, when the dietetic school spread its doctrines abroad for the relief of man. If you ask the French professors what is the best mode of curing disease? they will answer you, like the Greek orator, when it was enquired what was the first essential in eloquence? he answered *action*: and what the second? *action*: and what the third? *action*. So would the physicians of Paris, if it were enquired what was the first requisite in curing disease! they would answer, *diet*: and the second! *diet*: and the third? *diet*!

These important truths directly disprove the utility of the present mode of medical practice; that the system of man was never intended to be drenched with medicine to relieve its complaints. That the heroic medicines, and all the 20,000 articles of the *Materia Medica*, are a mere artificial system of cure, as hostile to nature and life, as cramming the stomach with an hundred kinds of food, is to the health and growth of the infant. How simple is the nourishment provided for that dear little infant that drops into the world; and should not its sickness be removed by a medicine equally simple and convenient? We might reason from the benevolence of the Deity, *a priori*, that, as food and medicine were the essentials of life; the one to support health and the other to restore it when lost; the Divine Goodness would equally provide for both, in the most ample and accessible manner. The first

we know he has supplied in great abundance and profusion; and can we doubt Him on the last? No! it would evince hostility against all his plans, and contradict our own experience. We can never be brought to submit to the mortifying conclusion, that Deity, who has spread out this vast continent; established it as an empire of freedom for the rights and the liberty of man; that he has filled it with the exuberance of his goodness, in the vast abundance provided to supply the need of every thing that lives; so that we may say, in the language of the royal Hebrew poet, "to any nation, never, He such goodness did afford;" that He has after all this, left our Country destitute of the one essential of life, medicine, to cure our diseases! Must we go to Europe to import mineral poisons? Must the wealth of the country be sent abroad to bring amongst us the instrument of death? Must we pay, with our substance and our lives, for aching bones, deformed countenances, emaciated bodies and ruined constitutions? And has the Deity reduced us to this dilemma? He whose goodness is pre-eminent over all his other works! He who has done so much for us, crowning the years with his bounty and filling the heart with gladness? Has He neglected this only one good thing; a safe and simple cure for our diseases, placed in our own country? No! he has not; we never can believe it! no never! never! never! The remedies are here; they are spread over the plains and mountains in abundance; they surround every cottage, and bloom round every cabin, over this vast and trackless wilderness. The cities and the navigable streams have them crowding on their verge and their vicinity, inviting the eye and the hand to gather them! Blessed provision! Shall we neglect our own mercies, and, from the mere force of

habit or strength of prejudice, adhere to the mad remedies of Paracelsus, and the dogmas of Hoffman and Cullen?

Dr. Thomson has led the way to an examination and reliance on the plants of our own country; the part of philosophy and patriotism, the course of wisdom and prudence, all must understand. It cannot lessen the dignity nor detract from the merit of the most exalted, to examine with care and candor the discoveries of this student of nature, who had the wilderness for his academy and the flowers of the field for his instructors. It has been said, and perhaps with more truth than is generally conceded to the remark, that the reason why the first poets so far excelled in their pictures of nature, in sublimity and flights of imagination. was, because they had little else to study but the Book of Nature; they were not led aside from the splendid scenery and magnificence of the creation of God, to cull the feeble flowers of man's production. The school that forms a poet may form a physician. If the poet sees and feels, the physician may taste and understand. Search all the records of all the innumerable and nameless nations which overturned the Roman Empire; they were hardy, healthy, powerful tribes; their doctors were of the Thomsonian school. If it is replied, that their health depended on their mode of life, and not the power of their medicines, the answer is at hand; this is partly true and partly not! They were liable to severe diseases, to wounds and accidents and casualties of various kinds; and their physicians were more expert in the cure of wounds, of burns, of sores, ulcers and fevers, than any now engaged in medical practice. They could extract the pain from a burn almost in an instant; and heal it, though burned to the bone, in a very short time, with certainty and safety.

There can be no good reason assigned but that the same powerful remedies which can quickly heal burns, wounds, and ulcers and gangrenous sores, may also heal the diseased viscera of the afflicted patient. In the Botanic remedies this is a real fact; the same medicine applied to the wound, or ulcer or bruise, is also taken into the stomach at the same time, and greatly facilitates the external cure. An application is made at once to the local disease and the whole system. The finger or the toe is wounded; the remedy is applied to the place, and administered to the patient at the same time though otherwise in perfect health. That is entirely new in the history of medicine; a discovery as exclusively Thomsonian, as his lobelia, or his bitter herb. Physicians never once dreamt of this mode of practice; if a person had a wounded toe, to administer a dose of medicine when there was no fever. But Dr. Thomson, acting on the true philosophic principle of the unity of man and of disease, whatever might be the external injury, fever or no fever, administered his medicine also to the stomach; and thus found by administering to the functions, and supporting the vital actions, that he performed a cure of the injured part with vast rapidity beyond the slow progress of the usual practice. He also, by this mode of cure, prevented gangrene and grievous suppuration, which otherwise might have taken place, to the great danger of the patient, and the lengthening out of his calamity.

It was very common in the established practice, if the injury was serious, to let blood as a preventive of fever. Now, I appeal to the common sense of mankind, whether in point of rationality, this practice is to be compared to Thomson's. A man receives an injury, in perfect health; the physi-

cian, in order to cure him, begins by inflicting on him a second injury, drawing off his blood; and perhaps a third, dosing him with calomel. Now, to thus disorder and destroy the vital powers, is it any wonder that the patient sickens, the wound gangrenes, and life is in the utmost jeopardy? If the patient escapes, it is with an amputated limb, or a broken constitution. Dr. Thomson, in similar circumstances, draws no blood, gives no mercury; sickens not his patients by hostile remedies; but administers a remedy congenial to nature, and all the vital functions. The *vis vitæ* is strengthened and invigorated to save the wounded limb and support the patient above the diathesis of death. If this be not true philosophy and wisdom, we may exclaim with the patriot, "O virtue, thou art but an empty name!"

Dr. Donaldson, who practised many years in the East, says he was well assured by a gentleman who had travelled extensively through the empire of Hindostan, that he never met with a person maimed or bereft of a limb; for such was their mode of cure, that they could save the most severely wounded or shattered bone, without being forced to resort to amputation. Thomson's practice in the West, promises to establish the same results, and proceeds on the same principles. The remedy, in both instances, is a vegetable medicine, poured upon the wound and administered to the stomach. Inflammation and gangrene, and even pain, are excluded by the power of the remedy. In this city, a child had his leg shattered by a cart running over it; the neighbors assembled, as usual on such occasions, and called for a surgeon immediately to amputate the limb. One of the Botanic doctors happened to be passing by; he proposed to save the limb; but was laughed to scorn. The parents, however, dis-

tressed at the thoughts of the pain and mutilation of the child, agreed to let him make the trial. He first gave the child some medicine; fixed and tied up the shattered bone as well as he could; poured the liquid on it; gave the child more medicine; left directions to pour at intervals on the wound, and give to the child, till he fell asleep; in a short time the agony abated, and the child fell into a sweet refreshing sleep; slept ten hours, awoke in fine health, never complained of pain more, and in a very short time was perfectly well, the limb straight and strong as the other.

And this is not the only instance; there are very many which might have been enumerated. And it is firmly believed by the most judicious and upright men, conversant with the practice, that, were it universally to prevail, the use of the knife would be banished from America as well as India, in cases of wounds and broken limbs! Of what immense value would this practice be in the army and navy of our country, should we have another war? which heaven forbid! How many valuable men would be saved to their country, by this medicine, which the knife now sends to an untimely grave? The sword devours but few beyond the numbers of the surgeon. The campaign of Napoleon in Russia, will show that the work of death was but half done, when the roar of the cannon and the musket had passed away from the field of battle; the surgeons came to amputate, and how few survived of that mighty multitude who passed beneath the knife! I blame not the physicians of the west; they had no better practice amongst them. And I appeal to India, and to the known facts of Dr. Thomson's practice, to show that the evil may be avoided; and should pride and prejudice stand for a moment in the way of a blessing so great and beneficial to our country?

Dr. Donalson mentions two other facts of the eastern practice, which go to illustrate and establish the claims of Thomson. The first is, he says the Indian doctors can cure fever in one day, with mathematical certainty; and the most obstinate cases in two days at most. Vegetable remedies are the only ones in use; and such is their power, that they fairly astonish the European physicians. The second remark is, that mercury has obtained, in the Indian practice of the English physicians, for about fifty years, and with the most fatal and terrible effects. Some physicians discovered, or thought they had discovered, that mercury was not good in acute diseases; notwithstanding they still persevered in their prescriptions, with death staring them in the face; and exhibited their mercury as if it was as innocent as breast milk.

Dr. Donaldson regards it with a kind of horror, and hopes, by way of consolation to his afflicted mind, "that there are still left in India, men of sufficient humanity and independence of mind, to break through the established rules and modes of practice, and commence a new era in the history of medical science."

Dr. Thomson never decried the use of mercury so vehemently as Dr. Donaldson; for he had not witnessed its horrible effects in the burning, sultry soil of India, as Donaldson had done. The action of the mercury on the heart and arteries, in that climate so adverse to life, was such that it seemed to turn the whole system of the blood into a mass of putrefaction in a few hours. Yet, such is the force of habit, or the delusion of prejudice, that the majority of practitioners still persevere in administering this deadly poison.

What shall we say to these things? Alas! we must leave them amongst those inscrutable myste-

ries of the human mind which led the pious pilgrims of New England to imprison the Quakers, and burn the witches! There are many anomalies in man; and the history of religion and medicine furnishes us with some sad and mournful examples. In this respect, however, the human mind is fast advancing in the march of wisdom, and holding her proud and princely course to reach the blaze of science. It is very usual to declaim against the age as deteriorating from the standard of ages past; but in this respect, at least, it is surely advancing in reputation and profound judgement.

The action of all medicine depends on the state of the living powers, and the stomach which receives it! The remark is as old as Hippocrates. "Medicine, said that venerable sage, has no power in itself; it will not act on the dead, but on the living; and its action will be in proportion to the state and condition of the living subject." Hence, the danger always in the use of dangerous remedies. The state of the stomach never can be thoroughly known; it cannot be ascertained what will be the operation of the medicine, until it is too late to prevent it. Mercury, or tartar emetic, is given to one patient, and does very well; administered to another, and it produces the most dangerous or fatal results. For it cannot be foreseen what will be the operation until the trial be made. Is there no safety then, you will ask in administering the heroic medicines! None! There never can be certain safety in administering poisons to the human system; they may act right and they may act wrong. If they have not the desired effect, they are absorbed by the system; and then farewell to health! farewell forever for the tranquil mind, the peaceful slumbers, and the rejoicing heart! The feeble and emaciated frame, the sinking pulse, the

trembling and fluttering heart and shattered nerves, all testify that firm health has fled forever! It is a maxim founded on truth and experience, that there can be nothing safe in medical practice, but that which is not poisonous; and then no matter what may be the state of the system or the condition of the stomach; no evil can possibly ensue. The patient is safe in every event. If his case is not made better, it is not rendered worse. He has not to strive against the physician and the disease.

In this very city, but yesterday, a physician administered to his own daughter a dose of tartar emetic; it did not operate according to the intention of the prescriber; the father then gave her twenty grains of calomel; it threw her into dreadful spasms, and her life was despaired of. In this deplorable dilemma, the wretched father who thought he had killed his own child, sent immediately for a Botanic doctor and his remedies. The young lady was instantly relieved; was out of danger in four hours, and was next day able to leave her bed! She then declared that no other medicine but the Thomsonian should ever again be given to her; she seemed to be convinced it had saved her life. The new remedies have more in their favor than is generally supposed. Those who are not hostile to them, say they are good in some cases, or they are good for nothing, and this last seems to be the most general belief. Some, indeed, affirm them to be rank poisons. The accusation, however, is fast dying away, and a physician is now ashamed to commit his understanding, by affirming that lobelia is a rank poison. But none believe, but those who have seen the trial, that these Thomsonian remedies are more powerful and rapid in their operation than those of the established practice. In convulsions, in spasms, in cramp.

of the stomach, in bleeding of the lungs and stomach, in fainting, and various diseases, which require rapid relief, the medicine has been tried often in this city, and with the most speedy and happy results. A gentleman, taken with a bleeding of the stomach, sent for a physician; but his family being afraid he would die before the physician could arrive, sent for a steam doctor, who was his neighbor. He stopped the bleeding immediately; two physicians arrived, and confessed his life had been saved by the application.

There is not any thing, perhaps, in use, which will so soon relieve the system as this medicine; and to penetrate a diseased organ or purify the internal structure, it has not yet been equaled.

Facts are the true and faithful witnesses to decide controversy. The cause of Thomson is on trial at the bar of public opinion and public scrutiny. His friends try, of course, to defend it, and his enemies, to impugn it. But the public may easily decide for themselves. The examination and the testimony are within our grasp, and certainly the subject cannot be of indifference to any who regard the health of their families and friends.

LECTURE XIV.

THE EXTENT OF THE THOMSONIAN REMEDIES.

AN objection to the Thomsonian practice, considered unanswerable by its impugnors is, that he has only one remedy for every disease; this they conceive to be the very essence of quackery. This objection is, however, susceptible of two distinct

solutions, which, if they do not satisfy, will at least weigh deep in the balance, with every dispassionate mind. The first is derived from Dr. Sydenham himself, who says the *Materia Medica* is swelled beyond all reasonable bounds, and that two-thirds of its articles are worse than useless. Indeed, the eternal multiplication of remedies, till the understanding is lost and confounded in the mass, reminds one of St. Anthony's devils. Twenty thousand tormented the good saint, but they were so small and intangible that the whole legion could dance a saraband on the finest point of a lady's needle, without involving or jostling each other! Of what avail can a vast innumerable class of articles be to a practitioner, who must either relieve his patient immediately or see him sink into the grave. There is no time to try experiments when life is ebbing with the rapidity of the flowing minutes: No! the remedy must be sure and speedy and safe, or death is only hastened in his course. The second answer to this objection, I shall take from an authority no less than Dr. Rush himself; when lecturing on the infallible certainty of medical science, yet to be attained, he remarked, nature was simple in all her operations! he had no doubt but the most simple remedies were to be discovered. Some lonely weed, trampled in the earth, might furnish a cure which had baffled all the wisdom of the schools. Bread and water were the simple aliment of food, not to this man nor that man, but to the whole inhabitants of the earth. Could not the God of nature, who placed the food and drink of man in low simple elements, also place his medicine in some of the most untried plants or flowers of the field? These answers are as full of wisdom as they are replete with experience. They were made by two of the most celebrated physici-

cians of the age in which they lived, and have still common sense and experience upon their side. Another answer might be here added, from the fact of medical practice. It is well known to all practitioners that out of all the articles of the *Materia Medica*, very few are in general use; six or seven remedies are about the extent of the general range of the physician's applications. The heroic medicines are the chief and general resort in all diseases. What advantage then in point of fact, have the volumes of the *Materia Medica* over the simple numbers of Thomson.

There is something very imposing in the classic names, and learned disquisitions of the recorded remedies of the schools; and so there is something very imposing in the splendor of an eastern despot, compared with the plain and simple manners of the President of these United States; but whether of these is the better man, the world will judge, and history, on her true and faithful page, will leave her infallible testimony. So of the Thomsonian remedies. It is useless to be angry, to decry or rail against them; if the people find them useful and effectual in healing their diseases, science may fight against them in vain. If they are found not efficacious, it will not require art nor learning to put them down; they will sink, like all other folly and imposition, by their own worthlessness. It is admitted on all hands that medicine needs improvement; let it not then be rejected, though furnished by a humble instrument, and coming undorned by the drapery of science.

Dr. Reynolds says, "We suspect every theory which proposes to conduct the cure of disease on a few general principles." A few general principles conduct the whole nourishment of the body, and why not the cure of its diseases? In the body,

there are many classes of organs and functions, solids and fluids; a strange and curious whole, composed of many parts. And yet a simple food, taken into the stomach, will nourish all these, supply every ligament, cartilage and bone, and the whole viscera, with its appropriate nutriment. Why not a unity in the mode of cure, in the remedy provided, as well as a unity in the body itself, a unity in disease, a unity in nourishment, a unity in feeling, in sympathy and in every thing connected with man. Take the strongest man, expose him to cold, and he takes a fever, not in this or that part, but fever all over, throughout the whole system; and yet the system was only partially exposed to cold. When the proximate cause of disease affects the whole system, why may not a single remedy affect the whole system in removing disease? The parity of argument is on the side of the unity of cure. It is supported by the same facts which demonstrate the unity of disease.

The wise man has beautifully observed, "that a few words, fitly spoken, are like apples of gold in pictures of silver!" A few general principles well established, are of infinitely more importance in the business of life, than ten thousand complications and collections destitute of practical utility. Of what avail to the practice of medicine has been the intolerable load of nosology, of pathology, of signs and symptoms, types and stages? Worse than nothing! They have only bewildered the practitioner, paralyzed his efforts and confounded his reason. The two thousand names of disease, carry absurdity and contradiction in their very front. Disease is but the departure of the system from its healthy state; and it would be as wise to talk of two hundred thousand departures, as of two thousand. The causes of disease are equally unreason-

able and unknown. Have any two physicians ever yet agreed upon the remote, the exciting, predisposing and proximate causes of disease? Never; for they do not know them; and how then can they agree! Men may reason about uncertainties, and crowd volumes full of speculation, but when the simple matter of fact is wanting; when there is no obvious and specific principle; it is a mere sail through oceans of vapor. To classify disease after the manner of natural history, led to all the absurdities of nosology; and to explain what was never understood, to the speculations and vain jangling of pathologists. Dr. Brown congratulates himself that he had not looked into a medical book for five years before he published his system; as the delusive reasoning of the theoretical writers would only entangle his understanding and cast darkness over the light of nature and obscure the splendor of truth. These confessions are not the solitary sentiments of an irritable or disappointed mind. No, they have been confessed, in substance, by the most eminent leaders of the schools of medicine.

Some bold and daring spirit thinks he has made a new discovery, and that all his predecessors have been wrong. He starts in the career of fame with his new theory; abuses or ridicules those who have gone before him; is followed by a crowd of pupils and admirers; triumphs his brief and troubled day; sinks into his grave, and his system is perhaps overturned before his ashes are cold in the tomb! Every student of medicine knows this to be a fact since the beginning; but especially from the days of Paracelsus to the present time. And that is not all; it will never cease to be otherwise until a perfect, safe and speedy mode of cure, shall have been discovered. Revolution will succeed to revolution, school to school, theory to theory, until

time or accident or necessity shall have crowned their system with perfection. For, finding himself wrong, disappointed, mistaken in his exhibitions of medicine, the active, ingenious and conscientious physician, will not rest; he will make every effort for the perfection of his system. And, if he cannot discover a new medicine, he will form old ones into new combinations. He will revise theories, and new model systems, and forever continue restless, until the great object of his search shall have been attained.

From the above remarks, the reply may be made, the Thomsonian remedies ought, upon that principle, to be readily adopted, or at least examined. And so they would, were it not for a reason, perhaps too invidious to mention—had a member of the faculty made the discovery which Thomson made, they would have, to a man, at least made trial of the remedies. We see how anxiously Dr. Rush seized upon the specific for cancer, though a deception; but had it been genuine, by this time it would have not only overspread the United States, but all the nations of Europe. Dr. Rush seized with the same avidity on Dr. Brown's doctrine of the unity of disease and life being a forced state. So sanguine was he upon this topic, that some of his friends thought he uttered sacrilege on the subject.

"Upon this subject, said Dr. Rush, the unity of disease and life being a forced state, Reason and Revelation embrace each other; Moses and the Prophets shake hands with Dr. Brown." Whatever mistake may be in his views, we perceive in them this important truth: That to arrive at any certainty in medical practice, the theories of life and disease must be simplified and reduced within the grasp of knowledge and common sense. For there was never yet a physician on the face of the

globe that understood all the names in Cullen's Nosology, with their characteristic differences and distinctions; state of the pulse; signs and symptoms and aspects of disease. No certain practice could ever be founded on such a system, because it is as absolutely beyond the reach of the understanding as to count the number of the stars. These matters are very easily arranged on paper, where they have the gravity and appearance of wisdom; but at the bedside of the sick they are as useless as a mountain of dust! They have often betrayed the practitioner to slay, instead of cure; and made him lament, when too late. Had he pursued another course, he could have saved his patient; but he was deceived by his names and signs. While studying this lecture, a gentleman called in my room; conversing on the subject, I mentioned Dr. Cullen's system as filling the practice of medicine with the blackness of darkness, and confounding common sense by classifying disease like the plants of Linnaeus. He retorted; that Dr. Thomson had the same remedy for every disease. I replied that was not exactly the fact; he had more than one remedy; but if that were, he had the authority of Dr. Chapman upon his side, one remedy would cure divers diseases, opposite both in their cause, symptoms and localities; and showed him the doctor's recommendation of Swaim's Panacea; in which he affirms that, although he could not account for it, yet such was the fact, that Swaim's Panacea did cure diseases altogether different, according to the theories and reasonings of the schools! He was silent, for there was Dr. Chapman's recommendation. Now, said I, the most formidable objection against the Thomsonian remedies is answered by one of your own faculty; and why may not Dr. Thomson discover a remedy to cure different diseases as well

as Dr. Swaim! The truth is, the absurdity so often urged in this objection, is not in the thing itself, but in the mode of comparison. In itself, it is perfectly philosophical; the unity of medicine agrees with the unity of man, his sympathies, his feelings, his health and his disease. But when you compare the one remedy with the artificial classifications and theories of the schools, the absurdity is very palpable indeed; it is like comparing a man with a centaur. But compare man with man; medicine with disease; and you find the perfect concinity established by the hand of nature, the unerring guide, from which proud science has often led man to stray into the deep darkness of strong delusion. For what is disease? The obstruction or morbid excitement of some organ, which in health moved with ease and facility. Man is not changed in disease, nor his constitution much changed in the incipient stages. A very simple remedy of the proper kind, like the kine pock, would at once restore him and establish health. Why then does he linger? Because either the medicine has no power over the disease, or because it aggravates the disease. To say a disease must run its course, is to say we have no remedy for it. There is no such thing in nature as a law establishing a course of disease. The Deity has established laws of order, of harmony and benevolence, but he established no law of disorder and necessary pain.

We know the wages of sin is death; but there is a remedy for that death, and for all the diseases which are its harbingers. The greater includes the less. That Goodness which provided a relief from the woes of the second death, could not fail to make provision for the pangs which presage the first; for the promise of a good old age, is included

in the comprehensive assurance that the saint shall inherit all things. The experience of the world and the promise of the latter day glory, establish the fact. A single instance will be sufficient to display this principle. The small pox must run their course. This was the common language, because they had no remedy for them; they did run their course with a fierce and fatal certainty for twelve hundred years. Had any one then said the day would come when that loathsome disease would be extirpated from among men, he would have been scouted as a mad man or a fool. But the day came, the remedy was found, and it is now found also, the small pox had no course to run; and so shall every disease be stopped and eradicated whenever the proper remedy shall have been discovered. The hope that the discoveries of Dr. Thomson had contributed to this great subject, induced me to deliver this course of Lectures; and, from all I have yet seen or known on the subject, I am persuaded, that however humble my efforts may be found, I am contributing to the cause of humanity and the relief for the miseries of man. If I thought these remedies dangerous to a single individual, or useless in removing complaints, there is no wealth which could have induced me to have spent one breath upon them. I know the condition of the poor; I have a deep sympathy for their wants and their woes; they can neither spare time nor money. On reading the Narrative of Thomson, I said to myself, if this be a fact and this discovery and mode of practice real, it will lift a vast load from off the poor and the oppressed. It was a high and holy commendation of the Gospel on its first exhibition, that it was preached to the poor. This new system of medicine seemed to be medicine to the poor; and, in this respect, like the equalizing

spirit of the Gospel, it sets them on an equality with the rich! Now, if both were established with equal certainty, O! how great would be the blessing! If the means for procuring the health of the body were equally within the reach of the poor as those of the soul, who would not rejoice. For these two important objects comprehend the whole sum of human happiness, health of body and health of mind. That man cannot be miserable who has a soul at peace with God, and a body on which the storms of life may beat in vain.

The Thomsonian remedies seem peculiarly adapted to the diseases of the laboring classes of society. Exposed as they are to greater hardships, severer toils, less nourishing food, they are more subject to rheumatisms, low fevers, putrid fevers, dysenteries, cholics and chronic complaints, than the other members of the community.

These new remedies are, in a high degree, powerful and safe to remove all these complaints, at a very small expense. They possess an energy which seems to communicate new life to the system, and renovate the feeble, fainting powers of nature. I have witnessed a few cases beyond the power of the established practice, relieved by this medicine in a manner so short and new to me, that I would forfeit my own convictions did I not speak of it as I do; and recommend it with the zeal of one who believes he is promoting the good of his fellow men, and contributing to the welfare of society.

Dr. Rush says, "in no part of the world is animal life, among the human species, in a more perfect state than in the inhabitants of Great Britain and the United States of America. For, in addition to all the natural stimuli which have been named, they are constantly under the invigorating

influence of liberty." "There is, he says, an indissoluble connexion between political freedom and physical happiness. And, if it be true that elective and representative governments have a greater influence on human happiness and national prosperity, they must also be more favorable to human life." Now, the idea of liberty here inculcated as conducive to life and happiness, is precious and dear to man in every department of life and practice. I have known patients refuse medicine, merely because they did not know what it was. The mystery and technical name seemed an infringement on the very freedom of thought, and disgusted the sick with the prescription. It is certainly gratifying in a high degree, to understand the medicine you are taking, the nature of its operation and safe and salutary results. Small things will influence the condition of the sick. All who have attended sick beds, must have observed that the least shadow of concealment or deception, whispering, or doubtful looks, or the color of mystery, will distress the patient. If he loses confidence in his physician, it will aggravate his disease. But what must be his condition when the grand principle of freedom is destroyed in the mode of administering; when he is reduced to the condition of the slave of an eastern despot; when he must in profound ignorance receive, with implicit faith, whatever is offered to him? How deadening must be the effects on a weak and worn out constitution? If it be objected, what confidence can the patient place in a Botanic physician, who is not a man of science? The answer is plain; the trust of the patient is not in the skill of the physician, but in the nature and power of the remedies, that they are safe and certain, congenial to life and productive of health. To relieve our hunger, we do not rely on the skill

of the cook, but on the nature of the food; so in medicine, our dependence should be on the remedy, and not on the administrator. Short and sudden has been the journey to the tomb to thousands who, by a proper remedy, timely applied, might have spent a long and useful life in the world.

This new practice possesses this great and decided advantage; it places the knowledge and the remedy in every family; the physician and the cure are always at hand. You have not to wander in the night to a distance and the patient dying, to seek a doctor, with the agony pressing on your spirits, that your wife or child or friend may be dead on your return. No, you can apply at once to your own resources, and at least keep the sick in safety till additional aid be called, if necessary. I knew a lady in this city, who cured her husband of a cholera morbus, in an attack so severe that if he had been left unaided till a physician could have been called from his bed, his case would have been very doubtful, if not entirely fatal, as many have in the same disease. Now, the whole amount of family medicine for one year, will not much exceed three dollars; for this sum you can procure a portion of all the numbers, and directions how to take them. Any one in the family can administer to another in perfect safety. There is a kind of peace and confidence established in the family, when they know relief is at hand.

This is a part of practical wisdom, which every good mind must appreciate to be provided especially in the warm seasons, for sudden and severe sickness. The benevolent Dr. Rush was exceedingly careful to inculcate upon his students, to instruct the families where they might practise, how to act in cases of emergency. In sudden cramp or spasm of the stomach, pour water on hot ashes and

drink it off; in croup or strangling, run a shovel into the fire, pour on it water or vinegar and inhale the steam; in a distressing cough, take salt and water, or stand with your back against the wall. These were all intended for immediate relief, until a physician could be called.

Now, the system of Dr. Thomson is not only for temporary, but permanent relief. It is the beginning and the end of the patient's cure. You are prepared to attack disease in its forming state, and pursue it without remission until a cure be finally established. Surely, to those who love health, the remedies are worthy of a fair trial; of a candid and patient investigation. The study of medicine I dearly loved, and the practice I would ere now have pursued, had I known a remedy of certain and infallible efficacy. But I knew of none such; and I cared not to encounter the pang of that dreadful disappointment which I have but too often witnessed, to see your remedies taking a course altogether the reverse of that which you intended, and your patient sinking by the very hand employed to raise him up! Others may sooth their conscience, and justify themselves in a manner of which I am ignorant; but I could never find but one answer which satisfied me—the uncertainty of medical practice, and the impossibility of ascertaining when you administered a dose; whether you were not hastening the patient to the grave. On consultation, you may see a practice entirely changed, when the sick is already dying; a plain confession they have died by the hands of the physician.

LECTURE XV.

A GENERAL VIEW OF THE WHOLE SUBJECT.

Since the first records of medical science, the profession has either slumbered under the shadow of a mighty name, or gone forth to war with the conflicting elements of passion, prejudice and perversity of soul. The pride of interest and the pride of science, the maxims of philosophy and the cunning of designing knaves, have all, at different times, obstructed the plain and simple progress of medical knowledge. A profession, at first simple and retired, became at length involved in all the bustle and business and learning of the world.

Hippocrates was celebrated as the first who separated the profession of medicine from philosophy. But the separation did not long exist. Philosophy was soon drawn within the magic circle, and lent her splendor and bowed her pride to adorn the mysteries of the healing art. For mysterious it must needs become, when the philosophy of life, of matter and of mind, were all brought into the illustration of pathology and the theories of disease. Medicine now put on her purple robes and began to assert her infallibility; but, like all infallible pretenders, she quickly finished, by her own example, decisive proof that her power was a dream and her pretensions a delusion. She changed her aspect with the changing times, and, at every new remove, still thought she had attained perfection. She was never idle, but full of life and activity; pushed her conquests, on every side, and her researches through every new and untried region of discovery and speculation. If she did not succeed, it was not because her efforts were

not multiplied and vigorous; but because the road in which she chose to travel was not that which led to the secrets of the healing art. There was much truth and much science and great industry, but the facts of perpetual change, confess that she was never long satisfied by some of her attainments, nor convinced that her labors had reached a close.

Some of the physicians have confessed that the practice itself did not change with the changing theories of medicine. That, after all the disputes and differences of medical professors, the practice remained nearly the same. The assertion certainly requires some limitation. There must have been a great variety in practice as well as in theory, though not so much as would appear to follow from the assertions of medical writers. Dr. Rush decried the nosology of Dr. Cullen, with great vehemence. To hear him lecture, one would imagine his practice would have been diametrically opposite, but it was not. The opposition to Cullen was in his theory, not in his practice. Dr. Reynolds, in taking a review of the jarring theories of medical professors, says, "the consequence is, that the people believe, from the fact of so much opposition, that there is no truth in medicine at all." And he says, it is boldly asked whether the profession be not rather in a worse condition now than it was three thousand years ago? This question the doctor does not directly answer. He does not say they now perform more cures than in former times. But he asserts, they possess more knowledge in Anatomy, Surgery, Chemistry, Botany and Physiology; he affirms, and affirms truly, they are superior to the ancients. But it is a fact not to be forgotten nor disguised, that the most learned physicians are generally the worst practi-

tioners, or at least they are not accounted so good as others, nor so much to be trusted. When a physician gets a professor's chair, his practice from that moment declines. Dr. Waterhouse, I am told by good authority, one of the most learned physicians of our country, has almost no practice. The learned and eloquent Dr. Barton, of Philadelphia, had very little; and Dr. Rush observes, in one of his lectures, that his practice was very small, and that little, generally among the strangers who visited the city. Dr. Darwin was afraid to publish his Botanic Garden, for fear of destroying his practice, and Dr. Rush affirmed that Drs. Armstrong and Akenside, on publishing their respective poems, lost all their practice.

Now the fact exists, whether true or false, that the people consider the pursuits of literature adverse to the medical practitioner, and detracting from his abilities to cure; that, so far from being a qualification, it incapacitates him from the responsibility of restoring health and preserving life!—And this opinion is not confined to the people, but has crept in among the physicians themselves. And there must be some truth in the sentiment, or it never could have such a universal sway over the human mind. But the truth is indubitable, the study of patients and not the study of books; experience and not reading; make the most complete and successful practitioner, and inspire the highest confidence in the patient. Dr. Thomson is called ignorant; but it is the ignorance of books, and not of experience. He had, and still has, a vast measure of the learning above described, as giving popularity to the physician and reliance to the sick, in the skill of one who has battled death in a thousand forms, and disease under every aggravation.

Dr. Rush, on the cause of failure in medical practice, makes the inquiry, why ninety-nine cases out of the hundred are lost, of those which are called the curable diseases? He first mentions ignorance in the physician; one not qualified, either by reading or observation, for the practice of medicine. Dr. Thomson does not fall under this charge. By observation he was well qualified. 2d. Dr. Rush says, incapacity in the physician. Dr. Thomson is clear of this charge also; for he had a natural aptitude and love to medical study. Had it not been for this, he never could have risen against the pressure which weighed him down and pressed him to the earth. 3d. Dr. Rush says, want of instruction in the physician; with good capacity, his instruction had been erroneous, and hence his practice pernicious and ineffectual. Dr. Thomson had the very wisest of all instructors, necessity and experience; instructors which never deceived man; but taught him to plough, to find out the use of corn bread, of potatoes, the use of wool and furs for clothing, and the simples used in medicine, and every thing valuable yet in use among the human family. 4th. Dr. Rush mentions obliquity of mind. There are some, says he, of such perversity of mind that nothing will teach them propriety nor enforce upon them the majesty of truth. If ever nature formed a plastic mind for the impressions of medical wisdom, that mind was Dr. Samuel Thomson's. The medical profession was the very niche in the temple of nature, for which the Deity designed him. 5th. Dr. Rush mentions as a fifth reason, or cause of failure in physicians, attachments to other pursuits and neglect of their own profession. Through all vicissitudes, Dr. Thomson has been attached and devoted to his profession; in prosperity and in adversity, in sickness and in health, in prison

and at the bar of judgment, he had but one single object in his eye, and one exclusive sentiment in his heart—the healing of the sick, the discoveries of effectual cures, the perfection of his system, and the relief of the wretched. Of all the causes of failure, in losing ninety-nine cases of the hundred, of curable diseases, enumerated by Dr. Rush, Dr. Thomson stands clear before the tribunal of the whole world. He is the very reverse in his whole character, from all those condemned by Dr. Rush. Dr. Thomson had very much of Dr. Rush's own qualification for the office of a physician, all indeed, but his book learning. He had the same enthusiasm, the same perseverance, the same determination to succeed and to excel, the same activity and taste for observation, and, in one word, the devotion of mind to the healing art, which eminently distinguished that kind and celebrated professor. Now, Dr. Rush being judge, Dr. Thomson would save the ninety-nine patients out of the hundred of the curable cases; and, in fact, his success has been always even beyond this proportion. He has not, no, nor his followers, lost one out of the hundred of their patients. I do firmly believe this fact cannot be contradicted. O! what a gain is here! What a waste of lives prevented, and destruction of the human race!

Dr. Chaptal, speaking of the heroic medicines, says, “should their constant and invariable effects through all Europe be found good and salutary, they ought to be exhibited. But government should impose and interdict upon their use, until the most rigid inspection should have ascertained their safety and established their success; and not suffer proud and pompous practitioners to sport with the lives and happiness of the assembled millions of Europe.”

Now, the remarks of Chaptal have been reiterated by Dr. Rush. While pouring the highest encomiums on the heroic medicines, he adds, "but in the hands of ignorant pretenders or proud and careless physicians, they are most fatal and destructive medicines." This will readily account for the fact of the ninety-nine out of the hundred of curable cases being lost. It was nearly one hundred years after the physicians of Europe introduced the antimonial medicines in their practice, before the college of Paris would suffer their introduction. And that most eminent college of physicians is now the first to banish the mineral poisons from their practice. They have the distinguished honor of being the last to receive those dangerous remedies, and the first to expel them from their community. And there is no people in the world, perhaps, who enjoy as great flow of animal spirits as the French. We cannot attribute the whole effect to climate alone; it will not account for the fact. Other climates equally good and salubrious, do not produce such happy results. We must look to a higher source, and causes more efficient and philosophical. A very eminent physician of great Britain says, "he has no doubt but the instances of self murder, which so frequently disgrace our country, may be attributed to the use of mercury and other severe mineral medicines so profusely and constantly administered." For such was the deplorable state of feeling produced, the sinking of the heart, the tremblings and prostrations of the whole system, the loss of appetite and animal hilarity, that life became an intolerable burthen, and the miserable patient preferred death, by his own hand, to such a miserable existence!—And the physician ascribes the abuse of opium and spiritous liquors, principally to the same cause;

the awful and terrible prostration produced by severe medicines, renders life such a burthen that the sufferer will resort to any means rather than bow before his misery!

Now, this is the true reason of the flow of spirits in France: Their light wine and light food; their simple medicine and cautious and reluctant use of severe medicines. Their spirits are neither crushed under a load of strong food nor poisoned by destructive medicines. Dr. Rush says, "in the free and happy republic of Connecticut, animal life for upwards of an hundred and fifty years, has existed in a higher degree and to a greater amount than in any other portion of the world of the magnitude." This fact he ascribes to their free government and happy institutions. The amount and force of animal life may be greater, and even more robust; but I much doubt whether the flow of animal spirits, even in Connecticut, will equal the vivacity of France. Our object is truth, and not speculation; we have all witnessed the sinking soul and loss of appetite, after a course of severe medicine. This is never witnessed in the exhibition of the botanic remedies; but, on the contrary, a degree of animation and a desire for food, which, to myself, was perfectly astonishing, and I presume must be to every one who perceived it for the first time. The conclusion of my own mind was, at the time, there must be something in this medicine extremely congenial to life and in harmony with all its laws. Its effects upon the patient are like those of sound and refreshing sleep to the husbandman; he rises restored and strengthened, like a giant refreshed by wine! It was so contrary to what I had ever before witnessed, and especially in the same patient, who had taken medicine for years before, and always with the loss of appetite, that I

could not, without sinning against my own soul, withhold my testimony and approbation. We are sometimes forced into opposition with our best friends; it is extremely painful. I was often, since the commencement of these Lectures, on the very point of abandoning them forever, and wished I had never begun the subject, but, as I progressed and witnessed the salutary result of this new practice, I did verily believe that I was serving God and my country, in striving to diffuse a knowledge of its doctrines. Nor do I think I can be mistaken, for a practice of forty years, over perhaps a million of people, in all varieties of cases and diseases, must be surely calculated to give certainty to the practice, if certainty can ever be attained in the medical profession.

There are three very important results of this medicine, which I would wish to impress on my hearers. It removes obstructions, restores the appetite, and invigorates the powers of life. Now these are the three essential points in the recovery of man to perfect health. When all the obstructions are removed, the vital functions have a fair and easy play, acting in harmony and vigor, and the glow of health is diffused over the whole frame. As we live by food and not medicine, the tone of the stomach being restored and the action of the digestion organs, we are enabled to receive food sufficient for the sustenance of health, and the cheerful glow of animal spirits renders life indeed a blessing. For I presume there are particular times when the best regulated constitutions feel that dejection of mind which made the poet exclaim—

“O! life thou art a galling load,
A long, a rough, a weary road,
To wretches such as I.

Now, a medicine which has the tendency to exhilarate the mind and rouse the animal spirits, announces by this single fact, its vast superiority and importance; that it is the medicine of life and health; and no matter when found, nor by whom discovered, the people should cleave to it, as a sacred shield and refuge from their woes. It is a solemn thing to take charge of the sick and cure diseases. There should be no enthusiasm nor fancy on the subject; but deep and solemn gravity and sober thought. And yet the effects witnessed by the operation of this new medicine are sufficient to rouse the mind to something bordering on the romantic. A regular physician of this city, on beholding the astonishing consequences on a patient, extremely reduced and emaciated, of lobelia and the other accompanying medicine, confessed that it was extraordinary; "but says he, it will not last; the effect is only temporary relief." But it was not temporary but permanent help which the patient received. If all the sick, relieved and cured by this practice, could be assembled together a fair statement of their cases and continuance of their diseases made out, I am convinced the world would be amazed at the multitudes and their results; and at the victory obtained over sickness and death, so signal and triumphant! For I am well aware that nothing but something extremely powerful and striking will overcome the prejudices of the physicians. I need but mention an instance of their obstinacy, to show what may be expected from them by the Botanic Doctors. "Miner and Tully, on fever," reasoning against the fatal practice of bleeding in putrid malignant fevers, observe, "Oceans of falsehood have issued from the faculty on this subject; for, when they discover their error, they have not the magnanimity to confess

it." And they mention one practitioner who had sixty patients and saved them all but one—by bleeding? No! but by not bleeding. The only one he bled died; and yet he held forth the idea that he had saved them all by this practice! And what could be his motive for this! A very pitiful one indeed; the sake of consistency. He had, in an evil hour, advocated the propriety of bleeding in all cases of fever. He soon found his mistake; changed his practice, but stuck to his theory, at the great expense of truth, and at the danger of misleading other practitioners.

We need not, therefore, much marvel at the accusations and abuse heaped on the Thomsonian practice, when grave and learned physicians are forced to bring such accusations against the faculty to which they belong; and I know policy often keeps them silent, when they are boiling with rage against the mal-practice of their brethren in the healing art; when, if they would speak out their sentiments, as they privately express them, they would plainly say, "the physician had killed his patient; his course was entirely wrong." This new practice has this vast and high prerogative, it cannot be wrong, and will not kill; no mistakes fatal here; no unexpected and sudden death, when you think the patient is just about to do well. I know a physician who put his patient through a course of mercury; in the evening he said he was doing well; he called in the morning and inquired for his patient, and was informed he was dead! He was struck dumb! looked on the lifeless corpse and departed without uttering a single word, with a load of woe upon his heart, that I would not have suffered for a mountain of gold! Yet he could not be blamed; he practised according to his education, and was utterly deceived in the operation of his

medicines. He thought they were curing the patient; but alas, they were digging his grave!

The power of prejudice and the empire of pride may prevail for a season, but the soul will at last arise and reassert the majesty of her own nature, and show unto the world that "that there are gifts beyond the power of education, and knowledge, which learning cannot bestow." Learning will neither make a great man nor a great physician, but it will highly advance the usefulness of those who are great by nature; who have received the patent of their dignity from God Almighty. Dr. Waterhouse said of Dr. Thomson, he had taken a degree from the school of nature; a diploma from her unerring hands. The very course of that education to which Dr. Waterhouse has so handsomely alluded, was calculated to instruct the author of the new system in useful remedies, and deliver his mind from every bias but the force of experience and truth. With a mind entirely uninfluenced by all authority; unmoved and unobstructed by any thing which had gone before him, he possessed an advantage which, I am persuaded, none ever possessed who were educated in the schools, where we are introduced to the fellowship of wisdom by the authority of books and professors. It is impossible for the most independent mind to perfectly retain its freedom; it will insensibly bow to the opinions of some celebrated or splendid authority. In after life, indeed, and by much experience, some superior souls are enabled to cast off the shackles of education; but they are the fewest number of that mighty host which walk forth from the schools of the world to propagate the errors of their predecessors. Dr. Thomson had nothing of all this to encounter; he was led by the hand of nature, and, without being aware of the fact, he was

travelling in the path of the Indian, the German and Celtic doctor; the doctors of antiquity, who, without complaint or failure, practised on the unnumbered millions who overturned the empire of the Romans, and still practise on all the nations of the Gentile world. He is, therefore, now a professor in the most ancient and extensive medical school in the world. A school, not on the decline and about to perish; but one beginning to revive; to put on strength; to extend her conquests, until the learned and the unlearned shall be gathered under the shadow of her wings, and triumph in the splendor of her acquisitions. And we see the dawn of this glorious era, which shall transform the face of the world.

In Edinburgh and London, in France and Italy, in the dark regions of Hindostan and the empire of the Chinese, we find this new light, on the subject of medical science, breaking forth, or rather it is the old light returning to those long forgotten regions of the world. And, when nature takes her proper course, only chastened and controlled by science, how great and glorious must be the amount of her operations.

In the United States, the example of Dr. Thomson will stimulate thousands to press forward in the same career, and press to the same object. A train is laid, like the philosophy of Bacon in the mode of argument and the investigation of truth, that will kindle a blaze which will astonish and amaze the nations of the world.

The first rays of science scattered on the earth were never totally absorbed and lost. From the first dawn of Divine Wisdom vouchsafed to man, till the last star of heaven's holy light shall perish from the firmament, there has been and shall be, in every age, advocates and adherents of truth, to

transmit it from generation to generation. The distance may seem immense through the origin and perfection of a system; but the slow and silent progress of indestructible wisdom, must finally flow on the horizon and cover the heavens with light.

There is a growth and grandeur in all the works of the Almighty. The labors of man may perish; for, like himself, they are often vanity and lies; but the doings of His hand, who walks upon the sky, can never come to nought. At first He instructed man in the simple method of curing disease by diet and the plants of the field. While he continued in this practice, his diseases were light and soon removed. In the pride of his heart, he loaded the simple elements of medical knowledge with the results of his own speculations. In this course he has pursued his way for three thousand years, to his own sad disappointment and bitter sorrow. He seems now willing to return; and, after the waste of ages and the complete exhaustion of the resources of science, he takes up anew the book of wisdom, which in scorn and presumption he had cast from his hands! The high disdain of human knowledge, is yielding fast to the sway of those eternal principles of immutable truth, inscribed by the hand of the Deity on the foundations of the universe and in the living characters of the starry sky. When freedom erected the pillars of her throne in our country, we were assured that we could not govern ourselves; that the people were incapable of self government. When the Pilgrims of the east first pitched their tents in the howling wilderness, they were persuaded it was unsafe to dwell near a man who exercised liberty of thought or used freedom of speech. We are now told we cannot cure ourselves when sick; that years of study are necessary to remove a fever or cure a heart-

burn. These last may be also mistaken, and, with the first, look back with shame and sorrow, in a few years, on the part which they had formerly acted and the perversity of the course they had pursued. And, even now, there is evidence sufficient to astound the most incredulous and shake the confidence of the most hardened. Were we able to collect, or had means to bring together the scattered fragments of truth and argument, on the true science of medicine, from Germany and Spain, from France and Italy and England, from India and the regions of this Western world, there would be a balance in the scale on the side of the new practice, which at least might induce its opponents to weigh with modesty the amount of their attainments. I now bid the subject farewell. If I have served the cause of truth and righteousness, I am satisfied; if I may have led any poor sufferer to the means of relief and safety, I am more than rewarded. If a single tear shall be wiped from the eye, or a pang from the throbbing heart, or a prisoner rescued from the grasp of the king of terrors, I shall never regret the days and nights spent in these studies, nor the effort to make them useful to the public. The subject, so far from being exhausted, is only begun. I have acted merely as a pioneer; a breaker up of the way on this new and untried subject. But if these Lectures shall provoke any more competent or industrious hand to engage extensively in the development of all the principles, the benefits and beneficial results of this important subject, I shall feel the deepest gratification.

And let it be remembered, if this system of practice is true, it will have the peculiar blessing of the Almighty upon its side; because it brings the power, the benefits and the beneficial results

of a safe medicine, within the reach of the poor; into their dear distressed families, who often perish for the lack of the means to procure medical aid! This single benefit cannot fail of drawing down from heaven the peculiar blessing of Him who bowed his majesty and left his throne and veiled his glories, to enter the world and preach the "Gospel to the poor!"

CONTENTS.

	PAGES
To the reader - - - -	3
Proprietor's Introduction - -	4
LECTURE I. Introductory remarks -	7
II. Historical view of ancient theories - - -	22
" III. Historical view of the modern theories of medicine -	38
" IV. The theories of Doctors Brown, Rush and Thomson -	51
" V. Medicine, as it is taught in the schools - -	65
" VI. Improved theory of medicine	75
" VII. Theory of fever, according to the modern systems of medicine - - -	88
" VIII. Fever, continued -	101
" IX. On medical poisons -	113
" X. Hepatitis and phthisis pulmonalis, or diseases of the liver and lungs - -	123
" XI. A general review of the nature and operation of Thomson's remedies - -	138
" XII. Review of Dr. Thomson's remedies - - -	152
" XIII. The power of the Thomsonian remedies - -	165
" XIV. The extent of the Thomsonian remedies - -	178
" XV. A general view of the whole subject - -	191

A GENERAL REFERENCE

To the Works quoted or alluded to in this Work.

Hippocrates	Falkner
Galen	Waterhouse
Celsus	Glisson
Plato	Winter
Aristotle	Kirkland
Clem. Alex.	Buchan
Syncell. Chron.	Ewell
Diodorus Siculus	Bezenette
Herodotus	Miner & Tully on fever
Pliny	Derham
Alexander's Hist. of Med.	Thomas
Encyclopedia Britanica	Niewenty
Encyclopedia, Reece	Burns
Medical Record	Richerand
Medical Journal	Magendi
Medical Review	Linnæus
Stahl	Bichat
Hoffman	Broussais
Haller	Thommasini
Van Swieten	Whytt
Baglivi	Hales
Sydenham	Zimmerman
Hunter	Barton
Harvey	Chaptal
Boerhaave	Chapman
Munro	Lieutaud
Cullen	Williss
Brown	Gaubius
Thomson	Huxham
Ray	Nichols
Rush	Mead
Reynolds	Vaughan
Barnwell	Des Cartes
Darwin	Lord Bacon
Hooper	Sauvages
Cooper	Pope
Donaldson	Haen
Newton	Vogel



WZ 270 R664C 1835 c. 1



